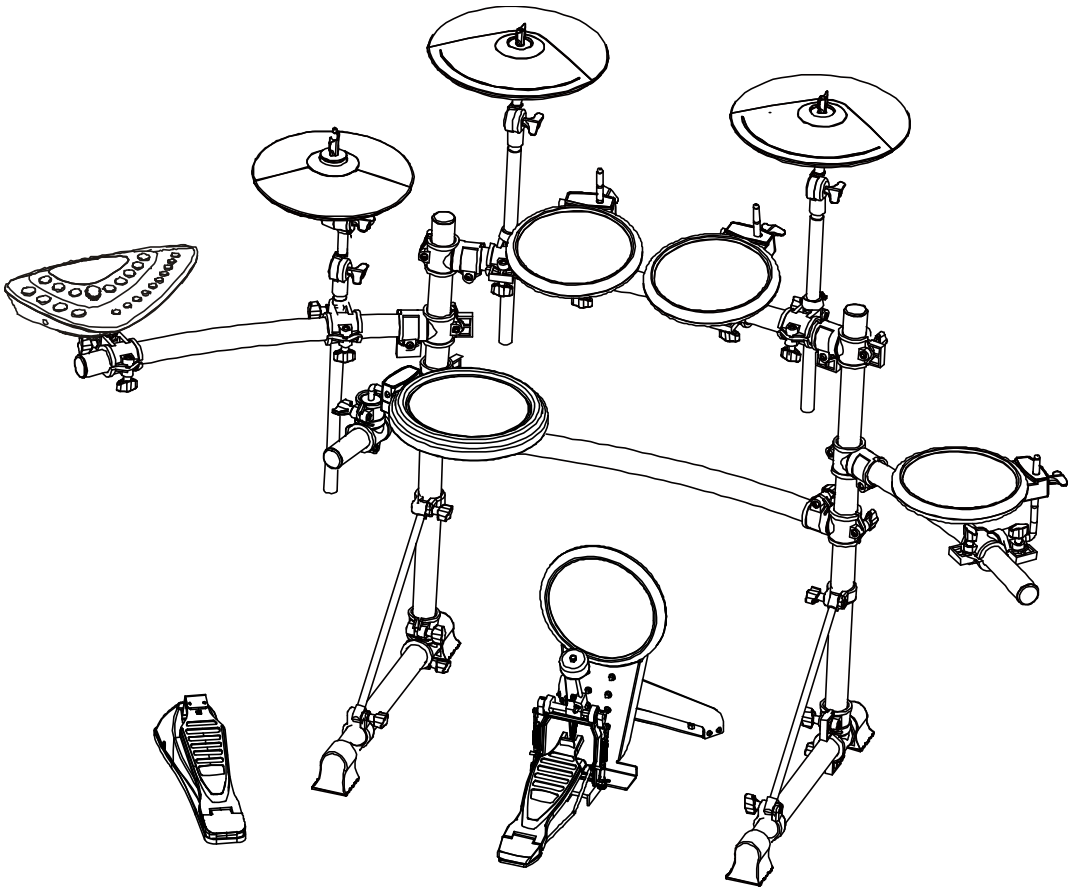
HD-010B DIGITAL DRUM

USER'S MANUAL



CAUTION

CAUTION

Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

WARNING

When using electrical products, basic safety precautions should always be followed, including the following:

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.
Also, this equipment has been tested and found to comply with the limits for following standard:
EN55022-2006
EN55024:1998/+A1:2001/+A2:2003
EN55013:2001/+A1:2003/+A3:2006
EN55020:2007
EN61000-3-2:2006
EN61000-3-3:1995/+A1:2001/+A2:2003

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

TAKING CARE OF YOUR DRUM

! DO NOT ATTEMPT TO OPEN THE UNIT OR MAKE ANY CHANGE IN THE CIRCUITS OR PARTS OF THE UNIT.

SERVICE AND MODIFICATION

This product should be serviced by qualified service personnel when,

- the power supply cord or the plug has been damaged,
- liquid has been spattered into the unit or it has been exposed to rain,
- the instrument does not appear to operate normally or exhibits a marked change in performance,
- the instrument has been dropped or the cabinet has been damaged.
- Do not attempt to open the unit or make any change in the circuits or parts of the unit.

HANDLING AND TRANSPORT

- Never apply excessive force to the controls, connectors, pads or other parts of the instrument.
- Always unplug cables by gripping the plug firmly, not by pulling on the cable.
- Physical shocks caused by dropping, bumping, or placing heavy objects on the instrument can result in scratches and/or more serious damage.
- Carefully check the amplifier volume control before stating to play. Excessive volume can cause permanent hearing loss.

CLEANING

- Clean the unit with a dry or light-wet soft cloth. Do not use paint thinner or petrochemical based polishes.

LOCATION

Do not expose the drum to the following conditions to avoid deformation, discoloration, or more serious damage,

- direct sunlight (near a window),
- high temperatures (near a heat source, outside, or in a car during the daytime),
- excessive humidity,
- excessive dust,
- strong vibration.
- The drum contains digital circuitry and may cause interference if placed too close to radio or television receivers. If interference occurs, move the drum further away from the affected equipment.

POWER

- Turn the power switch off when the drum is not in use.
- To avoid damage to the drum and other devices to which it is connected, turn the power switches of all related devices off prior to connection or disconnection of audio cables.
- Turn the power off if the main cable is damaged or the instrument is spattered with liquid.
- Do not switch the unit on and off in quick succession, this places an undue load on the electronic components.
- Unplug the AC power cord during an electrical storm.
- Avoid plugging the AC adaptor into the same AC outlet as appliances with high power consumption, such as electric heaters or ovens.

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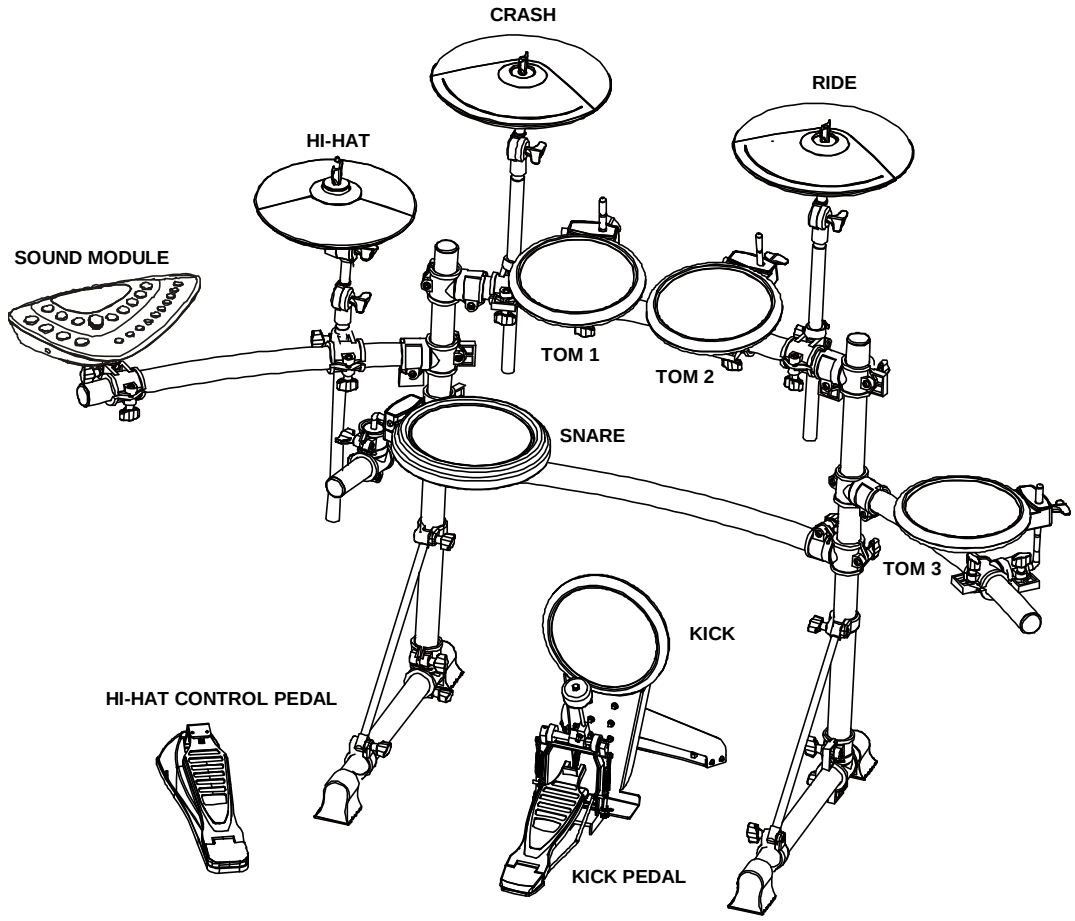
INSTALLATION



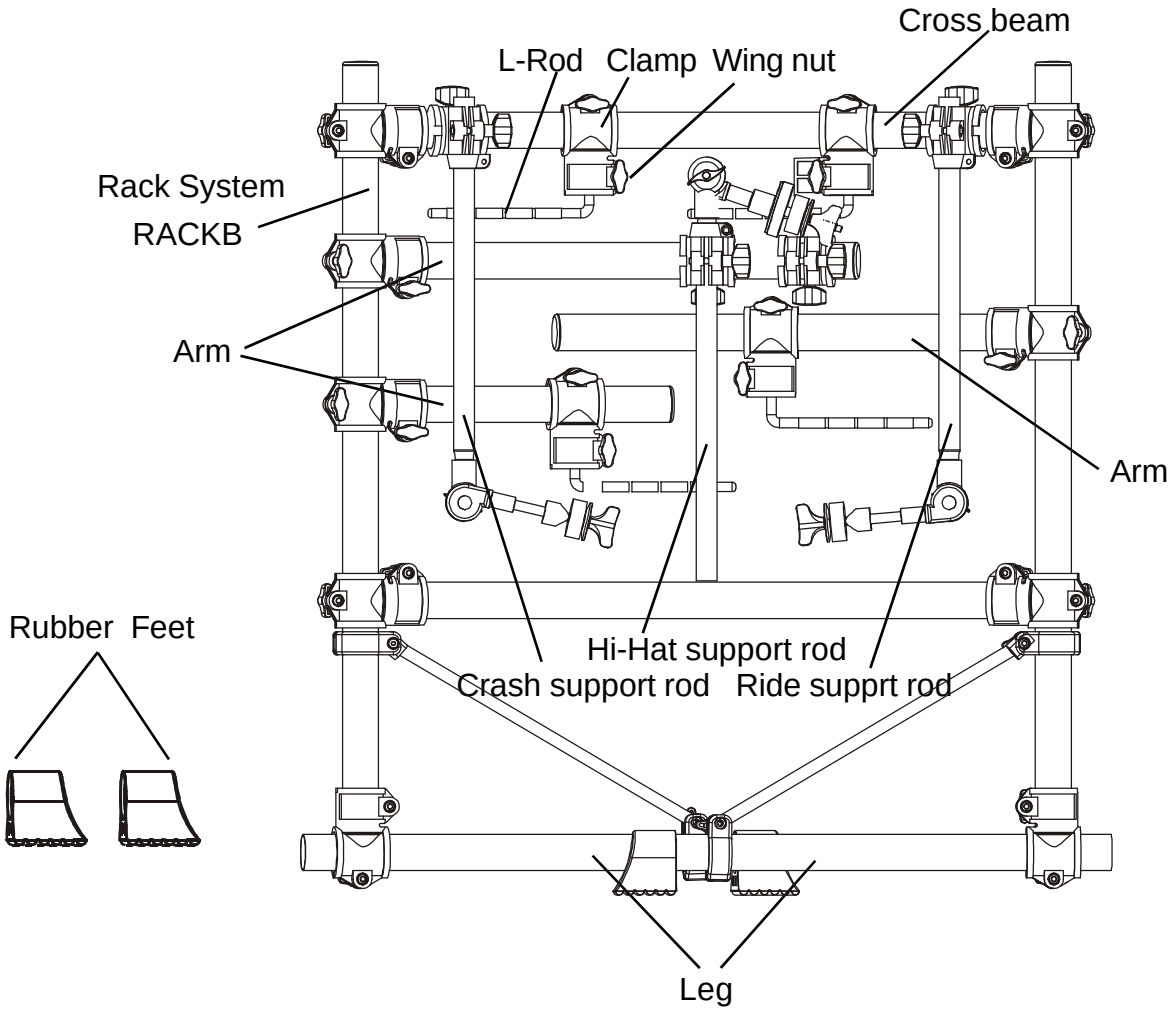
The diagram shows complete drum kit after installation.

Each drum pad, cymbal pad and Hi-Hat control pedal has its part number underneath the part name for your reference in installation. The part number is printed in packing box.

Power adaptor and connection cables are not shown in the diagram.

INSTALLATION

RACK SYSTEM

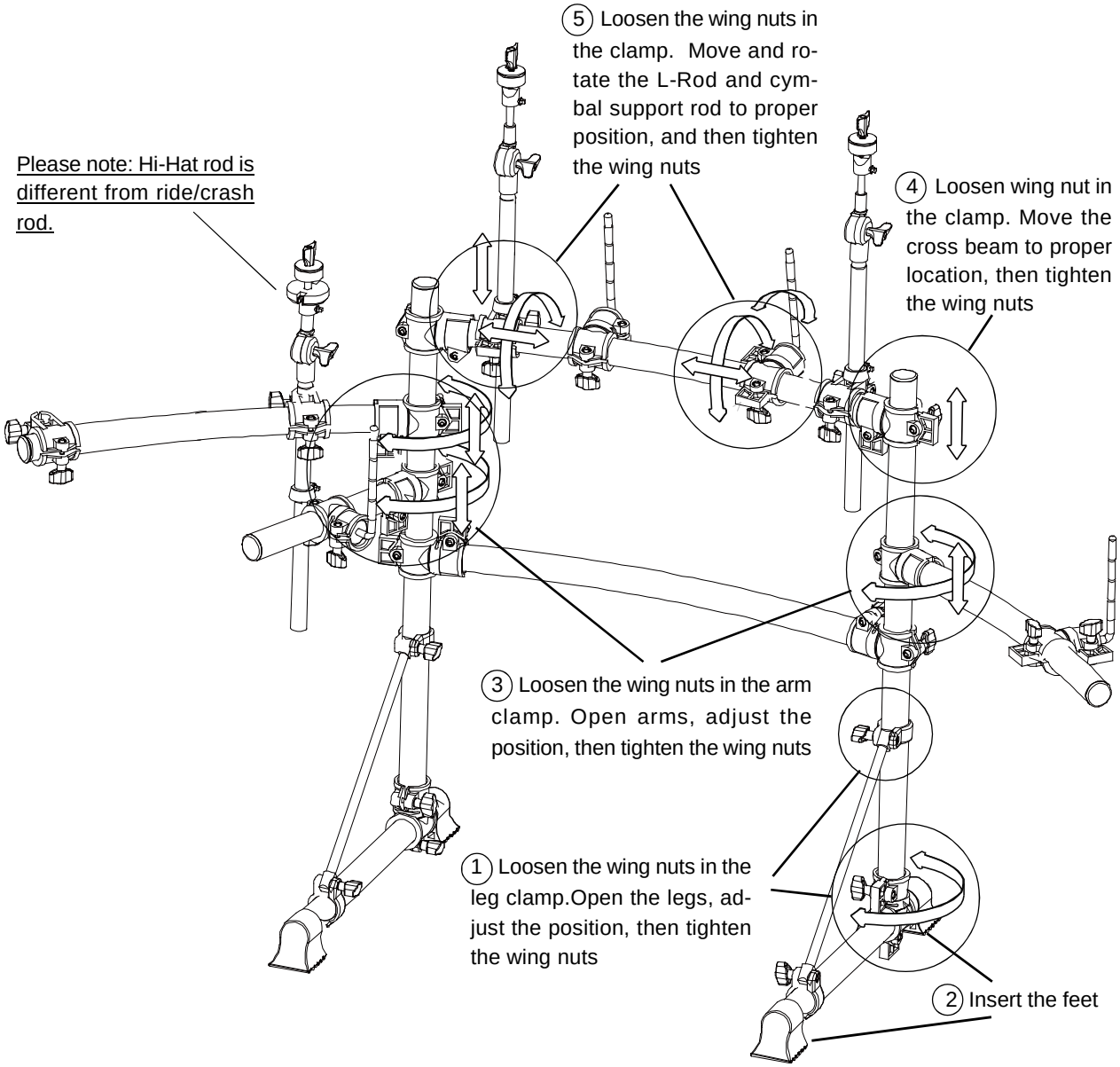


You can find all of these components in RACK SYSTEM RACK B package.

INSTALLATION

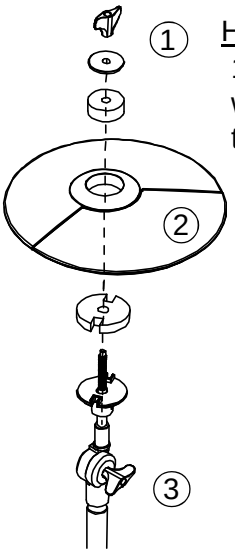
RACK INSTALLATION

Adjust arm, leg and cross beam to proper position. Place L-rods and cymbal support rods on relevant clamp as shown in the diagram.


5 Loosen the wing nuts in the clamp. Move and rotate the L-Rod and cymbal support rod to proper position, and then tighten the wing nuts
Please note: Hi-Hat rod is different from ride/crash rod.
4 Loosen wing nut in the clamp. Move the cross beam to proper location, then tighten the wing nuts
3 Loosen the wing nuts in the arm clamp. Open arms, adjust the position, then tighten the wing nuts
1 Loosen the wing nuts in the leg clamp.Open the legs, adjust the position, then tighten the wing nuts
2 Insert the feet

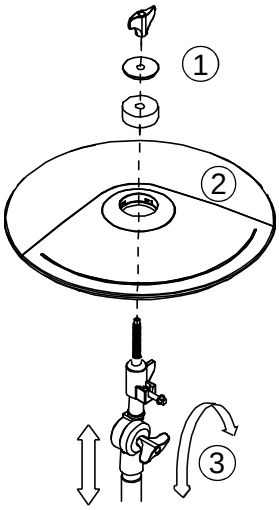
INSTALLATION

COMPONENTS INSTALLATION



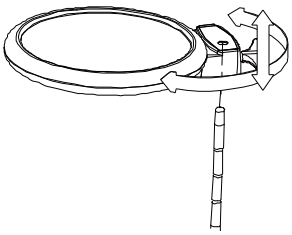
Hi-Hat Installation

1. Remove the wing nut, washer and felt pad from the top of the rod.
2. Put the Hi-Hat into the rod, then place back parts removed in the step 1. Fasten the wing nut but not too tightly. It allows the pad a little bit wobbling like real acoustic cymbal.
3. Adjust the pad position then re-tighten the wing nut.



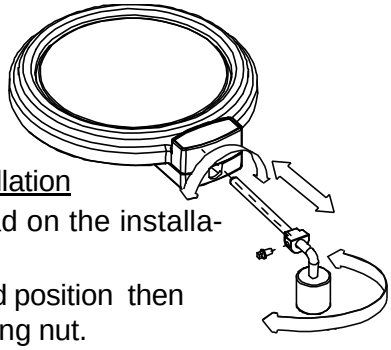
Crash and Ride Installation

1. Remove the wing nut, washer and felt pad from the top of the rod.
2. Put the cymbal pad into the rod, then place back parts removed in the stet 1. Fasten the wing nut but not too tightly. It allows the pad a little bit wobbling like real acoustic cymbal.
3. Adjust the pad position then re-tighten the wing nut.



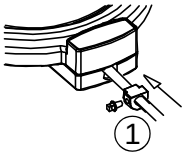
Tom Installation

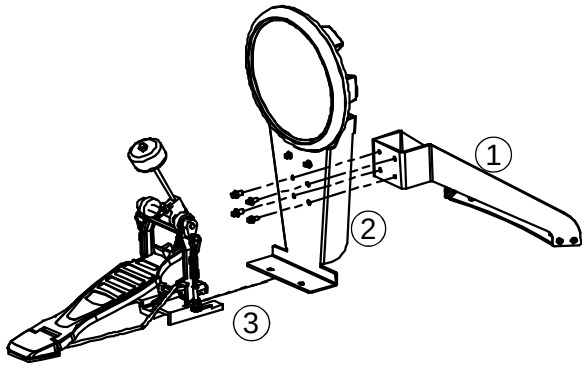
1. Loosen the wing nut, place the tom pad on the installation L-Rod.
2. Adjust the angle and height of the tom pad then tighten the wing nut.



Snare pad Installation

1. Pllace the pad on the installation L-Rod.
2. Adjust the pad position then re-tighten the wing nut.
3. Align holes in the pad and the lock-block (1), then in sert the block and fasten with attached key.

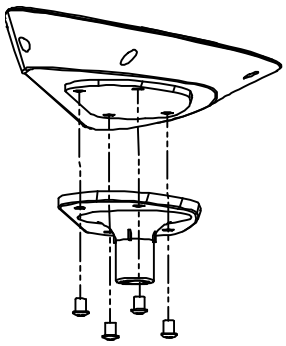




Kick Installation

1. Align holes in the support (1) and stand (2) then insert bolts and fasten with attached key.
2. Insert tongue (4) of the kick stand into slot of the pedal (3)
3. Align holes in the tongue and the pedal, then insert bolts and fasten with attached key. .

P-6B



Sound module Installation

1. Align holes in the sound module and the model mount then insert screws and fasten it.
2. Insert rod of the model mount into the clamp, then tighten the wing nut.

Finalizing the Installation

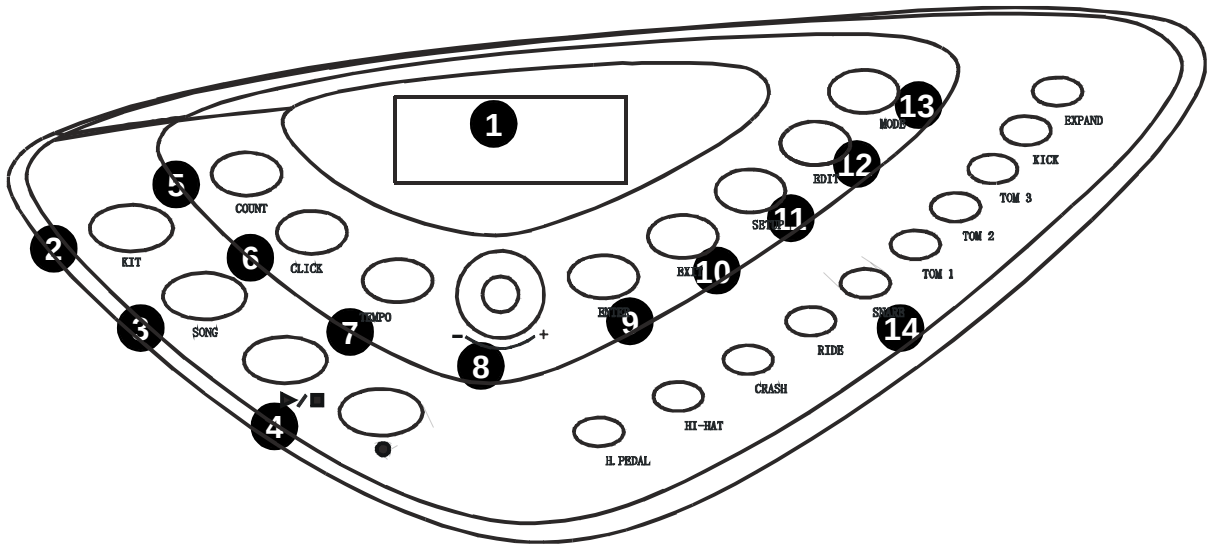
After install all components, fine adjust the arm, clamps and rods to the best position you desire.

Electronic Connection

Please refer to the SOUND MODULE Chapter for electronic connection.

SOUND MODULE

CONTROL PANEL



(1) LCD Display: Information display such as Kit number and name, Song name etc.

(2) KIT Button: Enter the Drum kit screen and select kit

(3) SONG Button: Enter the Song mode to play demo or User songs

(4) Sequencer Buttons: ● Record Button, Press it to enter the record window

▶/■ Play/Stop Button

The Play/Stop button is used in both Song and Record operations. Please refer to relevant chapters for detailed information.

(5) COUNT Button: Enter the Count mode to test how fast you can strike

(6) CLICK Button: Metronome switch and edit

(7) TEMPO Button: Change metronome tempo

(8) DATA +/- Knob: Rotate the knob to change data for all operations. The knob is with push switch, when push the knob down, the switch will be on. Press the knob down then rotate it to adjust master volume in the Kit Selection and Song window. Pushing down the knob can function as ENTER button.

(9) ENTER Button: Confirm your operating

(10) EXIT Button: Exit to the previous window or return to the Kit Selection window

(11) SETUP Button: Enter the Setup mode and set parameters

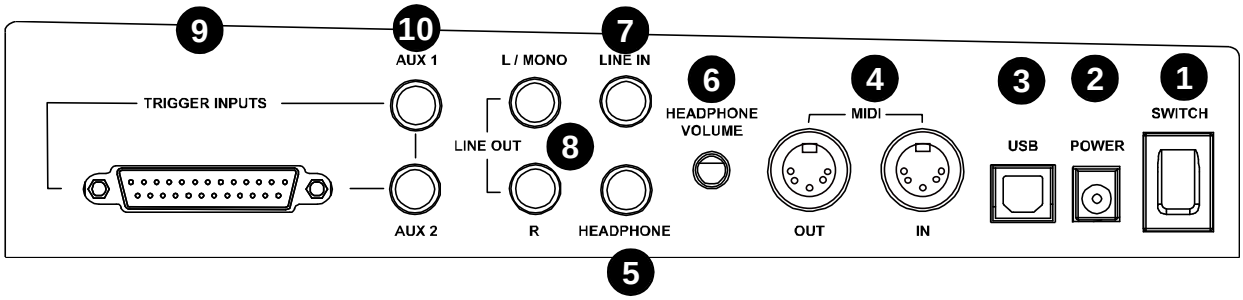
(12) EDIT Button: Enter the Kit Edit mode and edit parameters

(13) MODE Button: Change Demo playing mode

(14) Pad Select Buttons: Select a pad and its part for edit in the Edit mode. These are dual-function buttons. In the Kit Select mode, they are used for kit quick selection.

SOUND MODULE

BACK PANEL



(1) Power Switch: Turn On/Off the sound module
***Note*:** When you turn the power off, do not turn it on immediately. Wait at least five seconds to turn the power on so that the electronic circuits can properly reset.

(2) Power In Jack: Plug in the DC cable of the attached adaptor

(3) USB Jack: The USB connector allows you to connect the drum directly to your computer's USB port. The USB interface is compatible with Windows XP/Vista, Windows 7 and MAC. The computer will recognize the drum as Audio Device. Please see the MIDI & USB chapter of this manual for details

(4) MIDI Jack: MIDI jacks allow communication with other products equipped with MIDI interfaces. Please see the MIDI & USB chapter of this manual for details

(5) Headphone Jack: The drum has stereo headphone jack. You can play in total silence without disturbing others in the room by plugging a set of headphones into the jack.

(6) Headphone Volume Knob: Rotate it to adjust the headphone volume

(7) Line In Jack: Line In stereo audio input jack will mix the supplied signal with the internal drum sound. It can be used to hook up items such as CD players, MP3 player etc.

(8) Line Out Jack: There is no built-in speaker in the drum. Line Out stereo audio output supplies the drum output signal to external amplification, such as home stereo, PA system or other stand alone amplifiers. If you connect with external mono system, use L/MONO output and stereo/mono adapter is recommended.

(9) Pad Trigger Connector: Each pad and Hi-Hat control pedal has labeled cable. All cables are merged into a single connector. Plug in the cable into jack of corresponding component, Then, plug in the connector here.

(10) Expanded Pad Trigger Jack: Plug in the cable of the extra tom and cymbal into corresponding jack. AUX1 is for tom and AUX2 is for cymbal.

PLAYIN PAD

TURN ON THE POWER

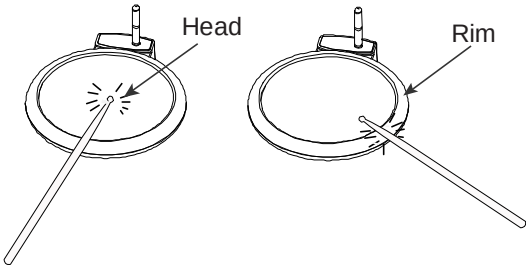
(1) Adjust volume of external audio device connected with the drum to lower level.
(2) Press the POWER button while don't strike pad or press the Hi-Hat control pedal.
(3) Turn on external devices connected.
(4) Strike pad and adjust the volume to proper level.

PLAYING PADS

All pads have striking force sensitivity feature. Strike the pad harder to make higher volume and strike the pad softer to make lower volume.

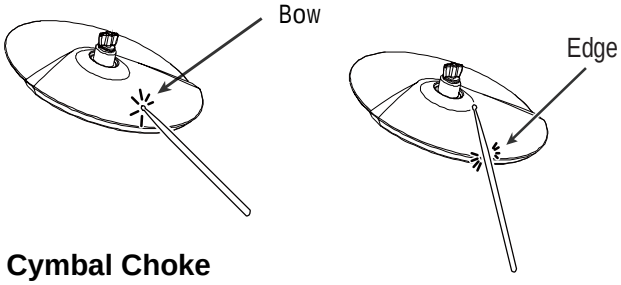
Playing Tom Drum

Strike the central position (head) of the pad to make head sound, strike the rim of the pad to make rim sound.



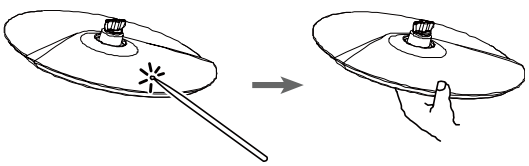
Playing Cymbal

Strike the central position (bow) of the cymbal to make cymbal bow sound, strike the edge of the cymbal to make edge shot sound.



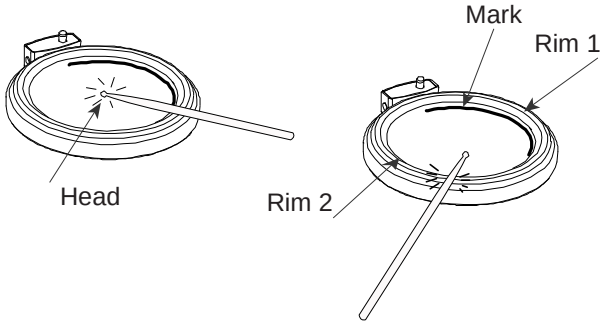
Cymbal Choke

Strike a cymbal, its sound will sustain. Then squeeze the edge portion to mute the sound. Please note that the Hi-Hat has no choke feature.



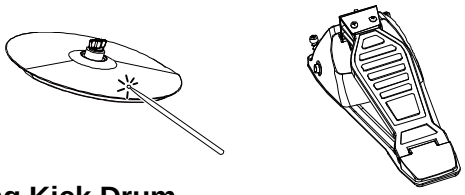
Playing Snare Drum

Strike the central position (head) of the pad to make head sound, strike the rim of the pad to make rim sound. There are two rim portions with different rim sound. Also, there is a mark on the pad to indicate the portion.



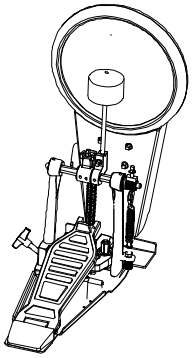
Playing Hi-Hat

(1) Strike the Hi-Hat pad without pressing the Hi-Hat control pedal to make open Hi-Hat sound.
(2) Strike the Hi-Hat pad with fully pressing the Hi-Hat control pedal to make close Hi-Hat sound.
(3) Strike the Hi-Hat pad while pressing the Hi-Hat control pedal gradually to make consecutive open to close Hi-Hat sound.
(4) Press the Hi-Hat pedal down quickly to make Hi-Hat pedal sound.



Playing Kick Drum

Press the Kick drum pedal to make kick drum sound.

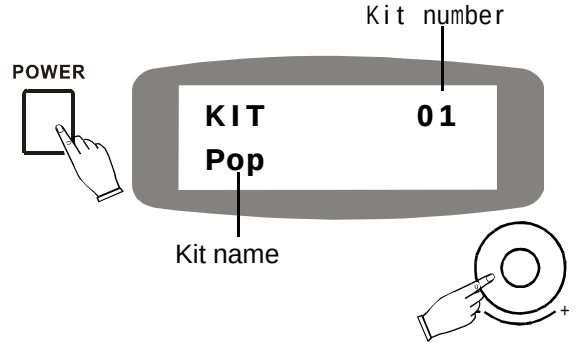


DRUM KIT

There are 50 preset drum kits and 30 User Kits. The kit is combination of different instrument voice assigned to each pad which has unitary style for performance. All the kits are for your choice. Any kit could be edited and saved as your own User Kit.

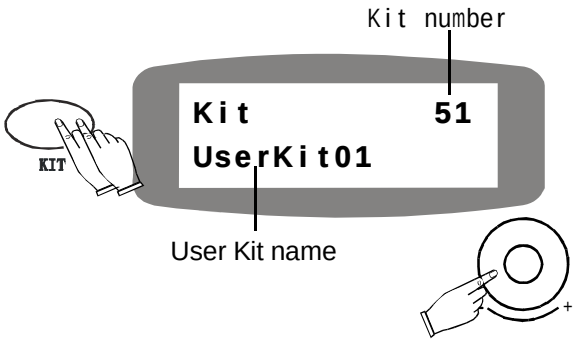
After power on and display initial information, it'll enter the kit selection mode automatically while the KIT button indicator will light up. The kit number and its name will be displayed.

In some other operation modes, you may press the KIT button to enter the kit select operation mode.



PRESET KIT

The preset kit number is ranged 01 - 50.
Rotate the Data knob to select a kit you desire. Rotate the knob clockwise to increase the kit number and anticlockwise to decrease the kit number. All preset kit number and name are listed in the Appendix KIT LIST.



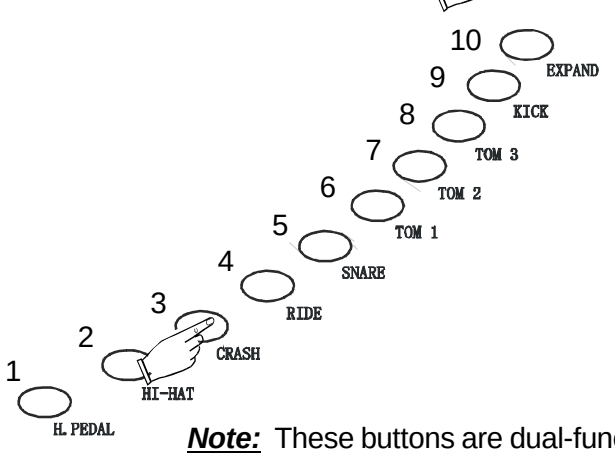
USER KIT

You can create your own user kit by edit function. Click the KIT button repeatedly will switch the Preset Kit and User Kit selection. The User Kit number is 51 - 80; the User Kit name is UserKit01 - UserKit30.

Rotate the Data knob to select an user kit you desire in the same way above.
The factory setting for all User Kits is the same as preset kit 01. You could call them even if you don't create your own user kit. Of course, you could replace it by editing. Please see <EDIT> Chapter in this manual for details.

QUICK SELECTION

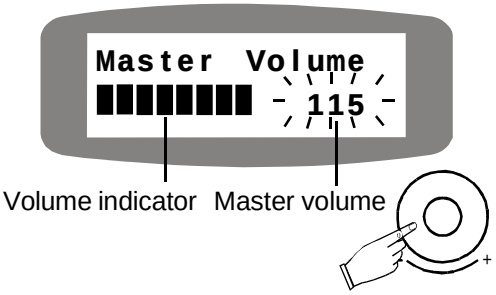
In the Kit mode, ten pad selection buttons are defined as quick kit selection buttons. Each one is assigned to a most common use kit. Simply press a button to select kit directly. The default quick selection assignment is listed in the Appendix <KIT LIST>.
After you select a kit, you can assign it to a quick selection button by pressing and holding down the KIT button then pressing a pad button.
Your assignment is nonvolatile even the power turns off.



Note: These buttons are dual-function buttons. When use them as quick kit select buttons, the indicator of the EDIT button must be off, Please see <EDIT> Chapter in this manual for details.

MASTER VOLUME

In the Kit and Song window, push the DATA knob to enter the Master Volume control window. The current volume level will be blinking. Rotate the DATA knob to change the master volume ranged 0 - 127. After about 5 seconds without any operation, it will return to the previous window.



SONG

Press the SONG button and its indicator will lights up. The song window will appear. There are two types of song: Demonstration song and User Song which is recorded by yourself.

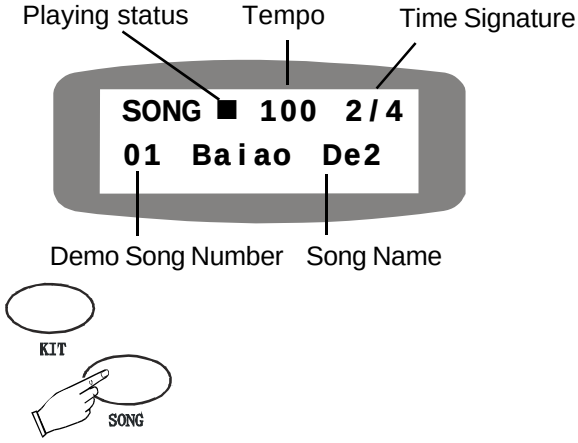
1. DEMO SONG

(1) Select and Play Demo Song

There are many demo songs built in. The name and number of demo song, playing status, tempo and time signature appear on the display. Rotate the DATE knob to choose a song.

Then press the ▶/■ button to start play; the button indicator lights up.

When the demo song is playing, press the button again to stop the playing, the ▶/■ indicator turns off.



(2) Demo Song Playing Mode

There are four modes to play song:

PLAY 1 - Playing selected song once

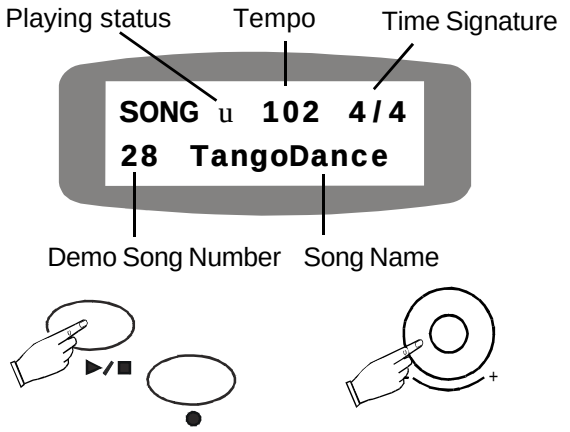
REPEAT 1 - Playing selected song repeatedly

PLAY ALL - Play all songs

REPEAT ALL - Playing all songs repeatedly

Press the SONG button twice to enter the play mode window. Rotate the DATE knob to change the playing mode.

The screen will turn back to the previous window automatically after about 3 seconds, or press the EXIT button to exit immediately.



(3) Practice with Demo Song

You may practice your own performance with the demo song.

There are three practice modes for yourchoice:

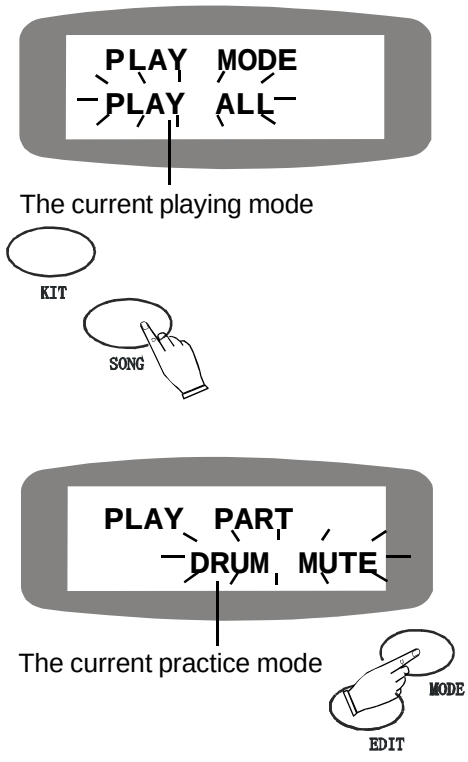
FULL - When press the ▶/■ button, you will hear complete song

DRUM ONLY - When press the ▶/■ button, you will hear drum sound only. It helps you to get idea how to perform drum.

DRUM MUTE - When press the ▶/■ button, you will hear background music without drum sound. Then, you can play drums by yourself.

Press the MODE button repeatedly to change the practice mode.

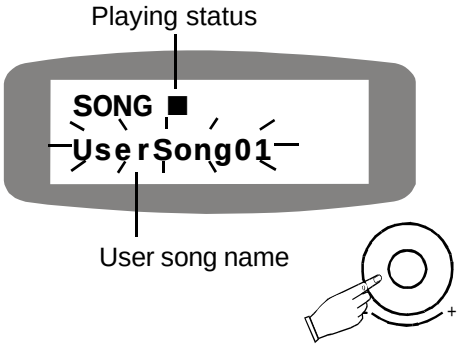
The screen will turn back to the previous window automatically after about 3 seconds, or press the EXIT button to exit immediately.



Tip: Volume of drum and background music is adjustable. Please refer to the Chapter <SETUP> for more information.

2. USER SONG

You can record your performance and save it as User song. When select song by the DATE knob, after the last preset demo song, the next song followed will be the first User song.

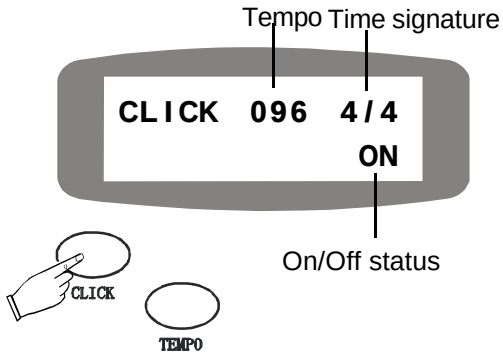


Tip: You may rotate the the DATE knob anticlockwise to reach User Song faster.

The display will show song name and playing status. If there is no user song recorded, it will show "*Free*".
The way of the User song playing is the same as Demo song playing. The playing mode is also available for User song.

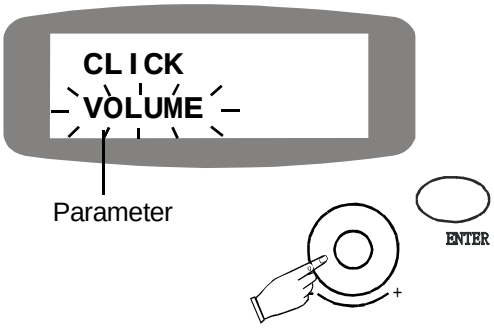
METRONOME

1. METRONOME



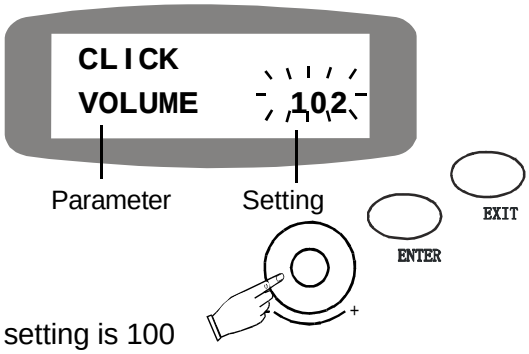
Press the CLICK button to switch the metronome On/Off while the current tempo, time signature and On/Off status will be displayed. After about 5 seconds, this window will exit automatically.

In the metronome window, press the ENTER button or push down the Date knob to enter the metronome setting window. There are 3 parameters can be edited, they are metronome volume, time signature and metronome sound. Rotate the DATA knob to choose a parameter to edit then press the [ENTER] to confirm. The parameters are listed below.



NOTE: **Push the Data knob as a button can implement the same function as press the ENTER button in many occasions. This is an easier way to enter your setting. In this manual, press the [ENTER] means press either the ENTER button or the DATA knob.**

Rotate the DATA knob to change the setting as listed below. Press the EXIT button to exit the and back to the metronome parameter select window; press the EXIT button again to exit the metronome window.



Metronome Parameters:

VOLUME - Metronome volume ranged 0 - 127, the default setting is 100

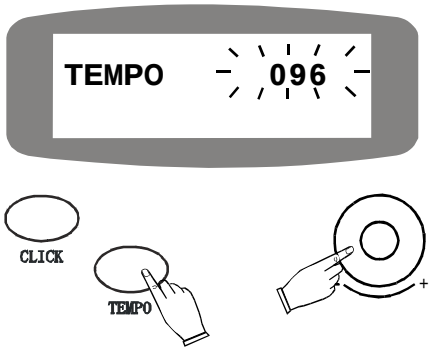
TIME SIGNATURE - 1-12/2, 1-12/4, 1-12/8, 1-12/16, The default setting is 4/4

SOUND - Metronome sound, ENG represents English, CHN represents Chinese, MET represents click sound. The default setting is MET

2. TEMPO

Press the TEMPO button, the current tempo value will blink. Rotate the DATA knob to change the tempo ranged 40 - 260. The default is 96.

After about 3 seconds, it will return to the previous window automatically.



DRUM KIT EDIT

A drum kit consists of drum pads, cymbals pads and Hi-Hat pedal physically, which generate sound in different way such as by striking head or rim of drum pad, striking cymbal bow or edge, pressing Hi-Hat pedal. We call the source to generate sound as Part, for example, the part generating sound by striking the head of Tom 1 pad is displayed on the screen as Tom1, the part generating sound by Hi-Hat control pedal is displayed on the screen as Pedal Hi-Hat etc. The detailed description is listed in Table 1 below.

Each part has multi parameters to determine its sound characteristics such as voice, volume, reverb level and pan etc. These parameters are listed In Table 2.

Table 1

Tom1 - Head of Tom1	Crash - Head of Crash
Tom1-R - Rim of Tom1	Crash-R - Edge of Crash
Tom2 - Head of Tom2	Ride - Head of Ride
Tom2-R - Rim of Tom2	Ride-R - Edge of Ride
Tom3 - Head of Tom3	Open HiHat - Hi-Hat open
Tom3-R - Rim of Tom3	Close HiHat - Hi-Hat close
Snare - Head of Snare	Pedal - Hi-Hat Control pedal
Snare-R1 - Rim1 of Snare	Kick - Kick
Snare-R2 - Rim2 of Snare	

The edit feature is to set parameter for each part, partly or for all parts in a kit. Obviously, assigning voice to the part is most impotant function. This drum has totally 492 voices can be select and assigned with this function.

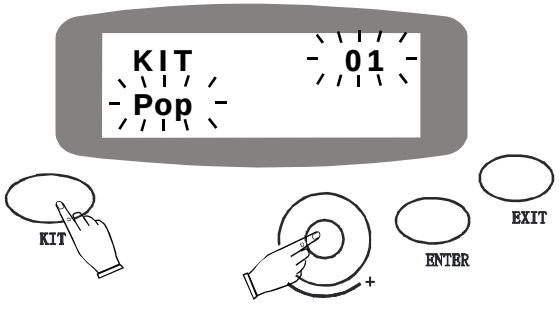
This feature makes it possible to change the currently selected drum kit setting. In this way, you may create your own drum kit and save it as UserKit.

The edit procedure is the same for every parameter, after you are familiar with the operation of voice assignment; it'll be easy to edit other parameters.

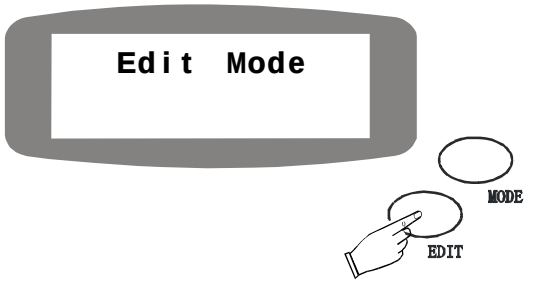
The following section is the edit procedure taking example how to change voice for a pad.

1. Select kit for editing

Select a kit for editing in the same way explained in the DRUM KIT chapter. The display shows the kit number and kit name.

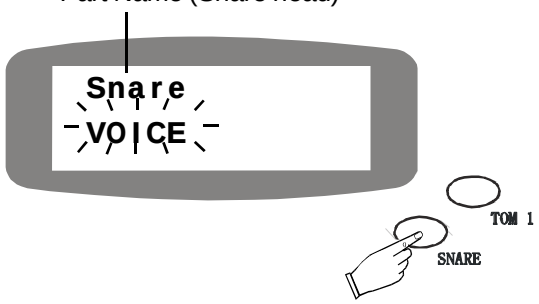


2. Enter the Edit Mode
Press EDIT button to engage the edit mode. The indicator will light up.

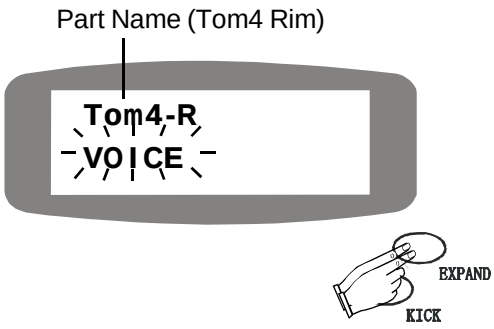


3. Select part to edit
Press a pad selection button to select a pad. Some pads have two or more parts, for example, the snare have head, rim1 and rim2 parts. The default part for a pad is head or bow.

Press the pad selection button repeatedly and the part will switch within valid parts one by one. For example, press the SNARE button once, the part is Snare (Head); press the SNARE button twice, the part changes to Snare-R1; press the SNARE button again, the part will change to Snare-R2. The part name will apear on the first row of the display. Please refer to Table 1 for details.

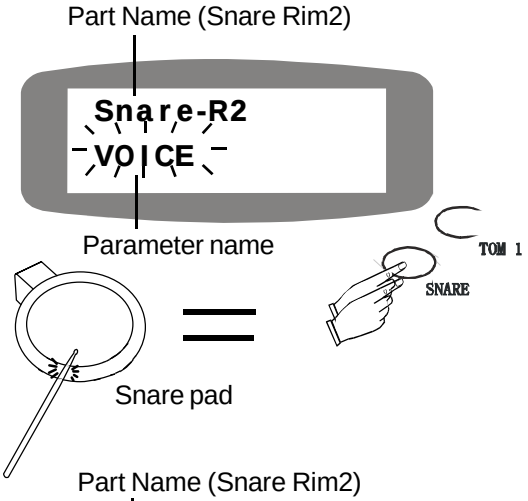


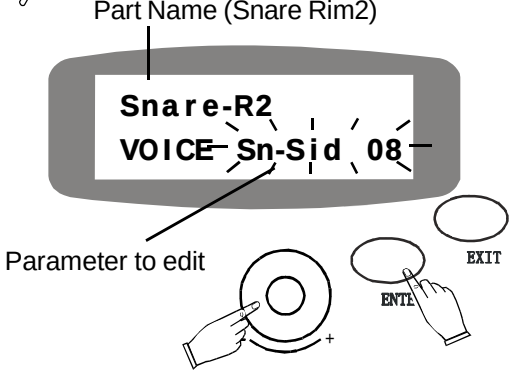
Or, simply strike the proper portion of a pad with normal strenth to select the part directly. You could select the Hi-Hat control pedal by pressing it down to the bottom.



4. Select parameter to edit
The current parameter is blinking. Rotate the Data knob to select a parameter to edit. In this example, select VOICE.
Press the ENTER button or push down the Date knob to confirm you choice. The current value/contents of this parameter will blink.

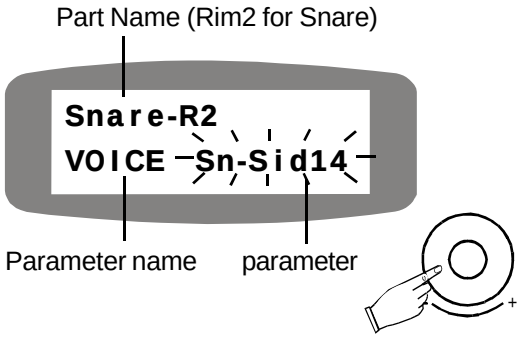
NOTE: **Push the Data knob as a button can implement the same function as press the ENTER button in many occasions. This is an easier way to enter your setting. In this manual, press the [ENTER] means press either the ENTER button or the DATA knob.**





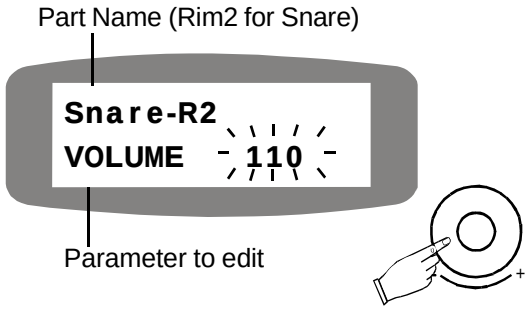
5. Edit the parameter

Rotate the Data knob to change value/contents of the parameter. In this example, you'll change voice assigned to Snare-R2. Any parameter has its own range to set. For example, there are 492 voices can be selected to assign to a part, referring to Appendix VOICE LIST.



6. Edit another parameter or part

Now, the first parameter (the VOICE in this example) editing for a selected part is finished. You may continue to edit other parameters for this part or change part to edit.



(1) Edit other parameter in the current part

Press the EXIT button, the screen will back to the parametr selection window with the parameter name blinking. Then, select a part by rotating the DATA knob. Then, edit parameters in the same way above.

Parameters can be edited are listed below:

Table 2

PARAMETER	DESCRIPTION	EDIT RANGE
VOICE	Voice assigned to the part	1 – 492
VOLUME	Volume of the part	0~127, 127 refers to the highest volume
PAN	Stereo pan of the part	-64~63, 0 refers to centre position, -64 to the most left and 63 to the most right position
PITCH	Pitch of the part	-10~10, 0 refers to standard pitch, -10 to the lowest and 10to the highest pitch
REVERB	Reverb effect level of the part	0~127, 127 refers to the highest level

(2) Edit another part

Press the one of the pad selection button and its indicator will light up. The part name will display on the screen. The current parameter to edit will keep no change. In this way, you could edit the same parameter (it is Voice in this example) for each part. Press the same button repeatedly to switch to another part, if necessary.

Or, simply strike the proper portion in the real pad to select the part directly.

The drum kit still keeps no change in all operations above.

7. Complete the edit

After finish all editing for the current drum kit, no matter single or multiple part/parameter, you can terminate the edit.

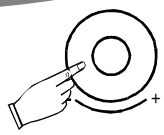
Press the EXIT button repeatedly until “Save Setups to ” on the screen. Then, you have two choices:

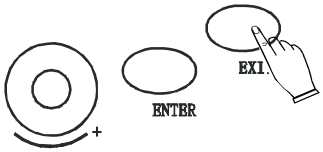
(1) Save edited drum kit as your own user kit: Rotate the Date knob to select an user kit number ranged 51 UserKit 01 to 80 UserKit 30. Press [ENTE] to confirm. The edited results are saved as desired User kit then exit the edit mode and return to the Kit window.

The user kit setting is nonvolatile even the power turns off.

(2) Press the EXIT button to exit the edit mode and return to the Kit window. All the edited results will be discarded.

Select a User kit to save your edit results





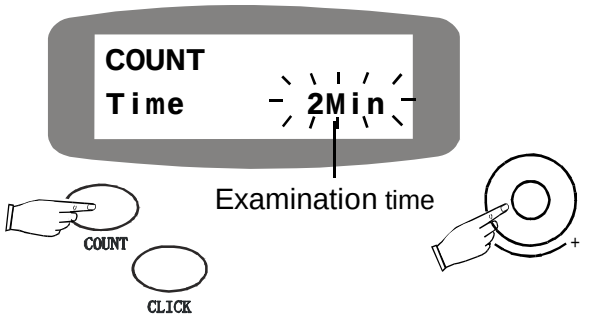
STRIKING COUNT

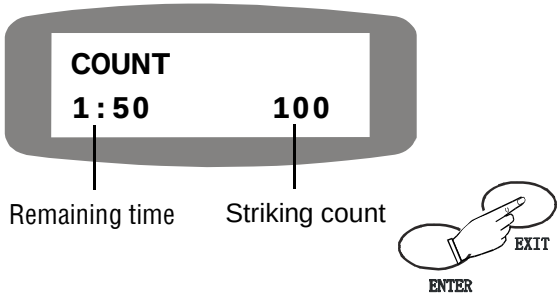
This feature allows you to test how fast you can strike pad. Press the COUNT button to enter the striking count window.

The examination time could be 1 minute, 2 minutes or 3 minutes. Rotate the DATE knob to select time.

The count will start as soon as you strike any pad. Count and remaining time will be displayed on screen. When time is over, You'll hear reminding sound for about one second and the remaining time is 0. Then you can check the results.

Press the EXIT button to exit this function.





SETUP

Press the SETUP button to enter the setup mode and its indicator lights up. The Setup window will appear with the item to be setup and its current value. The item name will blink. Rotate the DATA knob to select one of the 8 itemslisted below, press the [ENTER] to confirm. The item name will stop blink and its parameter value will start blink. Then, you can change parameter value by rotating the DATA knob.

Press the [ENTER] to confirmyour setting and turn to the next item, or press the EXIT button to cancel the setting and back to the item selection window.

In the SETUP item selection window, press the EXIT button to turn to the Kit window..

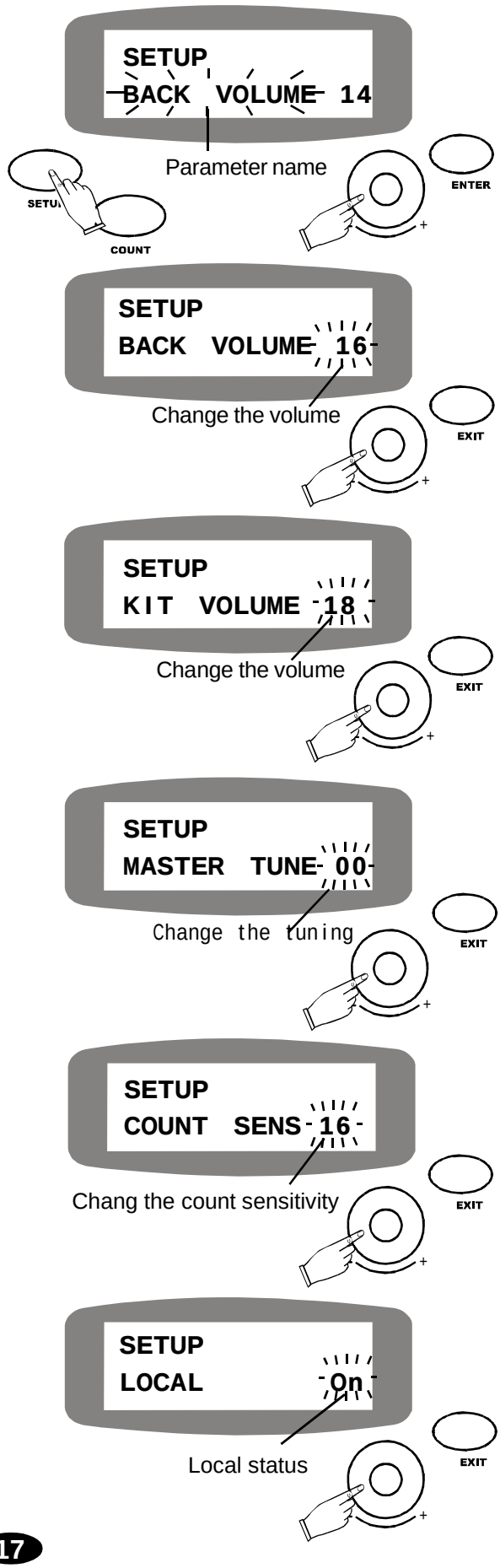
1 Accompaniment Volume
When play demo song, you'll hear percussion performance accompanied by background music. The parameter for the accompaniment volume is BACK VOLUME. Rotate the DATE knob to change the volume ranged 0 - 24.

2. Percussion Volume for Demo Playing
When play demo song, the parameter for the volume of percussion section performance is KIT VOLUME. Rotate the DATE knob to change the volume ranged 0 - 24.

3. Master Tune
This parameter affects sound pitch globally. In the "MASTER TUNE window, Rotate the DATE knob to change the master tuning ranged -50 - 50. 0 refers to standard 440 Hz frequency for A4 note.

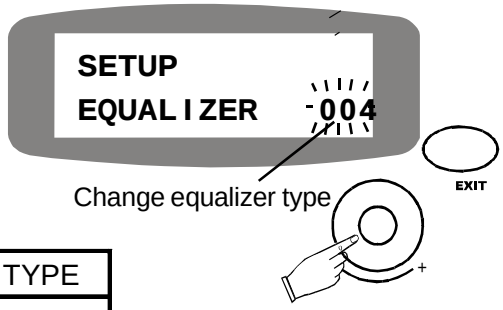
4. Count Sensitivity
The parameter for the sensitivity of the striking count test is COUNT SENS. Rotate the DATE knob to change the sensitivity ranged 0 - 24. It is suggested to set the sensitivity lower than your normal performance.

5. Local
When Local is On, you can hear sound by headphone or external speaker. When it is Off, built-in sound engine is turned off; therefore you cannot hear sound but the drum transmits MIDI message of your playing. Rotate the DATE knob to switch On/Off status. The default setting is On.



6. Equalizer

Tone of the drum can be adjusted globally by built-in Equalizer. There are 10 types of preset equalizer listed below.The parameter for select the equalizer type is EQ. Rotate the DATE knob to change the type code of the equalizer ranged 1 - 10.



No.	EQUALIZER TYPE	No.	EQUALIZER TYPE
1	Normal 1	6	Bright Mid
2	Normal 2	7	Bright
3	Bass Boost	8	Bright High
4	Bass Mid	9	Moderate 2
5	Moderate	10	Bright Mid 2

Press the EXIT button to turn back to the item selection window.

7. Advanced Parameter Setup

Chapter DRUM KIT EDIT introduces the sound edit procedure. The purpose of the sound edit is to change sound characteristics such as voice, volume, pan etc. The objects of advanced parameter edit are physical characteristics of pad such as sensitivity, trigger curve etc.

Any parameter is assigned for each pad individually. You must select a pad to edit. The default pad is Tom1. You can select pad to setup by pressing the pad select button or striking the pad directly.

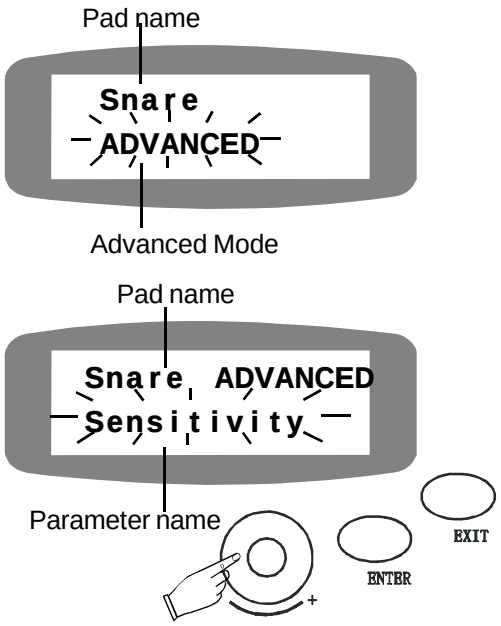
Note:

1. There is no alternative part such as rim, edge can be selected. It is different from part selection procedure in DRUM KIT EDIT. Also, you can select pad by hitting any part of the pad.
2. The procedure of the Hi-Hat control pedal setting is introduced in **Hi-Hat Pedal Setting** section separately.

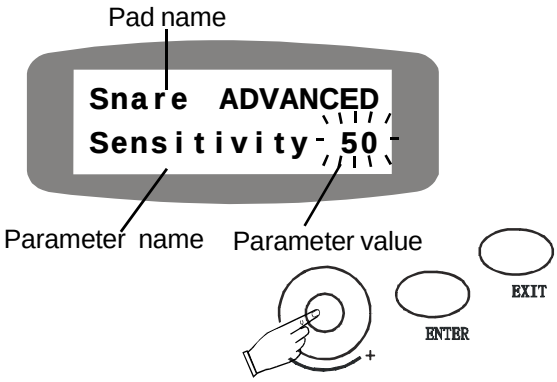
After ADVANCED item is selected by the DATA knob and press the [ENTER] to confirm, you can select pad to setup by pressing the pad select button or striking the pad directly.

Press the [ENTER] to confirm your pad selection. The advanced parameter will appear and blink.The default parameter is Sensitivity.

Rotate the DATA knob to select parameter. Press the [ENTER] to confirm. Its current value will appear and blink. Then, edit the parameter value by rotating the DATA knob. Press the [ENTER] to confirm your setting and turn to the next parameter. Press the EXIT button to give up current operation and back to Advanced parameter select window.



Tip: You can try setting results in real time.



There are 4 advanced parameters can be setup in the way described above.

Sensitivity

The pad sensitivity is ranged 1-127. Rotate the DATA knob to change it. The higher value represents the higher sensitivity. Please note that if the sensitivity is too high, it'll cause unexpected sound even if you don't strike the pad.

Headroom

This feature allows you to set playing strength for reaching the maximum volume, to accommodate your personal taste of performance. Strike the pad with strength, with which you want to get the maximum volume.The value will appear automatically per your striking, the Max. value is 127.

Trigger Curve

The trigger curve refers to how trigger signal's dynamic response relates to your pad striking. This feature allows you select a proper curve from 6 preset curves to control the relation between the striking strength and volume change. Change the curve until the response feels as natural as possible.
Rotate the DATA knob to choose a curve. The corves you may select are Linear, Exp1, Exp2, Log1, Log2 and Spline. The default curve is Linear.

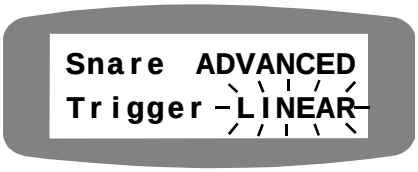
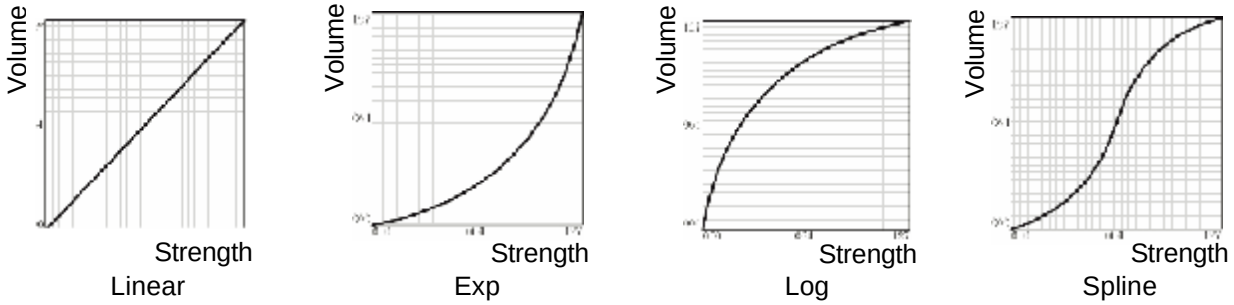
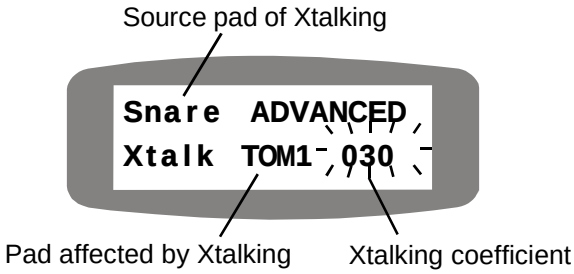


Diagram of 4 types of the curve



Cross Talk

When strike a pad, other pad(s) may sound occasionally. It is called cross talk. This feature allows you to eliminate the cross interference among the pads. The pad desplayed in the first row of the screen is source of the cross talk which cross-fire other pad(s), i.e. when strike this pad, other pad(s) will sound. This pad is that you selected for setup. The procedure of eliminating the cross talk is:



- Select a pad which is affected by cross talking. Press a pad select button or strike a pad with middle strenth.

- Rotate the DATA knob to change the cross talk coefficient ranged 0 - 127. The larger value will reduce unexpected cross talking sound, but too large value will cause sound missing. You should balance it carefully.

- Press the [ENTER] to confirm your setting. The display will stay on the Cross Talk setting for the current source pad. You could select another pad which is also affected by the current pad and continue your setting.

- Press the EXIT button to exit current operation and back to Advanced parameter select window.

Hi-Hat Pedal Setting

Strike the Hi-Hat pad without pressing the Hi-Hat control pedal to make open Hi-Hat sound (voice No. 286 - 304).

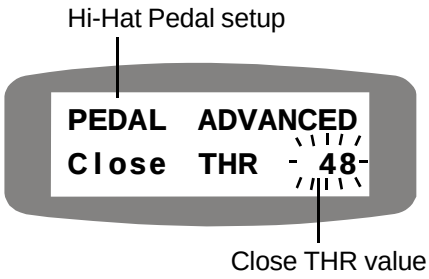
The Hi-Hat pedal has two zones of sound control, which is divided by Close Threshold point. Strike the Hi-Hat pad while pressing the Hi-Hat control pedal gradually to make consecutive open to close Hi-Hat sound when pedal pressing position is higher than closs threshold. When pedal position is lower than close threshold, striking the Hi-Hat pad makes close Hi-Hat sound (voice No. 249 - 285).

When press the pedal quickly and reach the pedal threshold point, it'll make Hi-Hat pedal sound (voice No. 305 - 316) even don't strike the Hi-Hat pad. The pressing pedal is quicker, the volume is higher. This bottom position is called Pedal Threshold.

The scale of Hi-Hat pedal movement is 0 - 127. The top position of the pedal is defines as 127 and bottom is 0.

This feature allows you to set thresholds per your comfortable pressing strength.

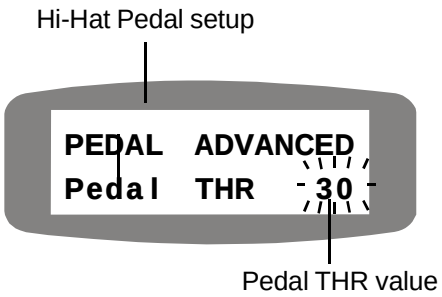
The Hi-Hat pedal setting is different from other pads. When select Sensitivity paramete, press the H.PEDAL button, the pad name will be Pedal. The first parameter is Closs THR and its current closs threshold value will be shown and blinking.



Then, press the pedal to position you desire as closs threshold while the real threshold value will be shown and blinking.
Press the ENTER button to confirm and turn to the bottom threshold setting; the parameter is Pedal THR.

Then, set the Pedal threshold in the same way above.

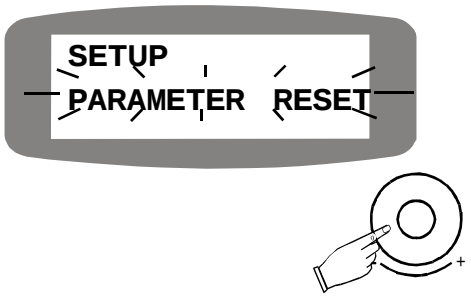
Press the ENTER button to confirm.
Press the EXIT button to exit current operation and back to Advanced parameter select window.



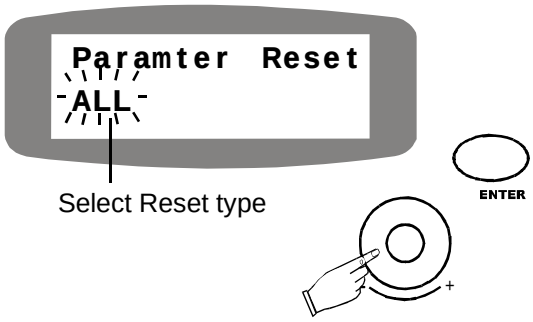
In the Advanced parameter select window, press the EXIT button to back to the SETUP item selection window. If you did some changes during the Advanced setting, the changes will be saved automatically. The display will say “Saving...”.
The settings saved is nonvolatile even the power turns off.

8. Reset

After setup, kit editing and recording, all of changes are saved in the unit. This feature allows you to recover the factory settings.
Select PARAMETER RESET in the SETUP parameter selection window then press [ENTER]. The reset window will appear.



There are four reset modes:
Kits - Reset sound parameters in all User kits which changed during the kit editing.
Parameter - Reset changes in Setup operation, except Advanced setting
UserSong - Erase all songs recorded by user
All - Besides reset all items above, it also reset physical parameters changed during the Advanced setting.

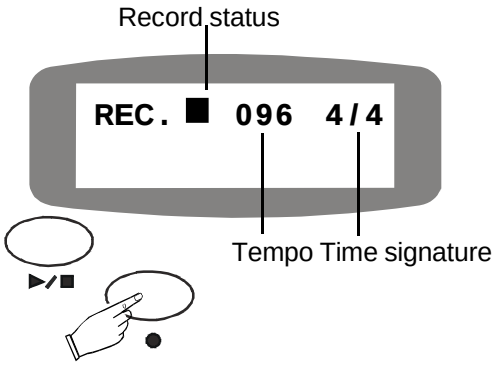


Rotate the DATA knob to select mode then press [ENTER]. The dialog screen will appear.
Press the ENTER button to confirm or press the EXIT button to cancel the reset operation and back to the Advanced parameter select window.

NOTE: Don not strike any pad after press the ENTER button until the KIT indicator lights up. It needs couple of second.

In the Reset mode selection window, press the EXIT button to back to the Advanced parameter select window.
In the Advanced parameter select window, press the EXIT button to turn to the SETUP item select window.

Press the ● button to enter the record window. The ● indicator will blink and the current tempo, time signature and record status are shown on the screen. Now, it is ready for recording. You may start record right now by pressing the ▶/■ button. Or, you could make necessary setup for your record. If you want to start record with the current setting, please skip the step 1 “Preparing”.



1. Preparing

As soon as you rotate the DATA knob, setup item will appear and blink. Roate the DATA knob to select item you want to setup, then press the [ENTER] to confirm. The value of the parameter will blink. Items can be setup are as follws.

(1) TEMPO - It is the tempo for recording ranged 20 - 260. Rotate the DATA knob to change it.

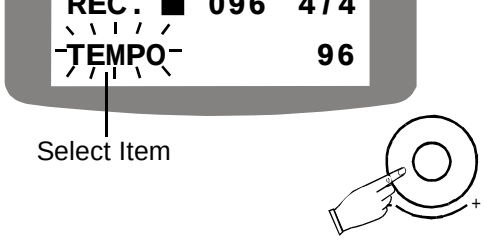
(2) P-TEMPO - It is the tempo for playing back your recording ranged 20 - 260. It makes it possible that play with slower speed when recording and playback with faster tempo. Rotate the DATA knob to change it.

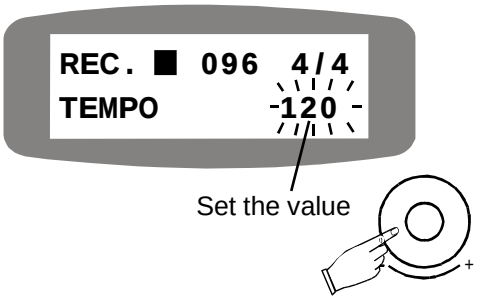
(3) TIME-SIG - The time signature for the metronome. Rotate the DATE knob to choose one you desire. Please refer to the <METRONOME> chapter of this manual.

(4) M-SOUND - The metronome sound. Rotate the DATE knob to choose one you desire. Please refer to the <METRONOME> chapter in this manual.

(5) METRO - Metronome On or Off during the record. Rotate the DATE knob to switch On and Off.

Tip: If you don’t need to set some items, simply press the [ENTER] to jump to the next item.

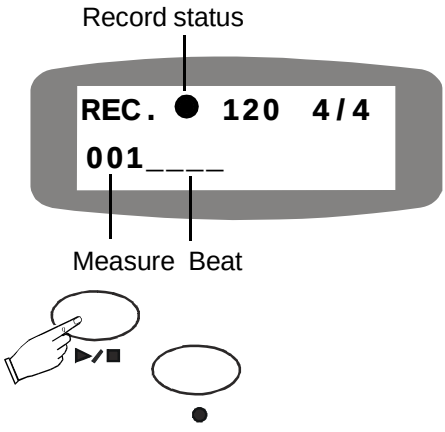




After seting, press the EXIT button to back to the preparing window. Press the EXIT button again to the record window. You can start record under both windows.

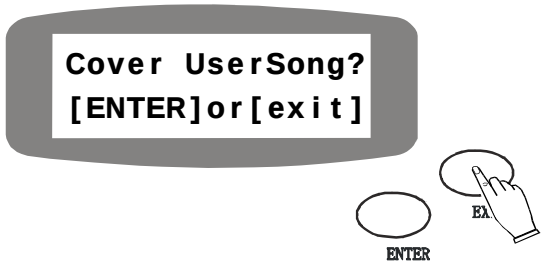
2. Record

Press the ▶/■ button to start record. The ● indicator will stop blinking and keep lighting.
After 4 beats count-in, the record starts immediately, no matter you start play or not. The record measure count will appear on the display. Also, the current beat in the measure will be displayed with numbers of “----” mark.



Press the ▶/■ button again to stop the recording. The screen will go to the save window. The Max measure can be recorded is 255, When the measure counter reaches the Max, the screen also goes to the save window.
In the save window, a song name for saving your record will blink. You may rotate the DATE knob to choose song name. Press the [ENTER] to save recorded song, press the EXIT button to turn to the Kit window without saving.

If the song name was already used for the previous recording, it'll ask you do you want to replace it with the new recording? Press the [ENTER] to save it the turn to the Kit window, or press the EXIT button to back to the previous window for selecting another song name.



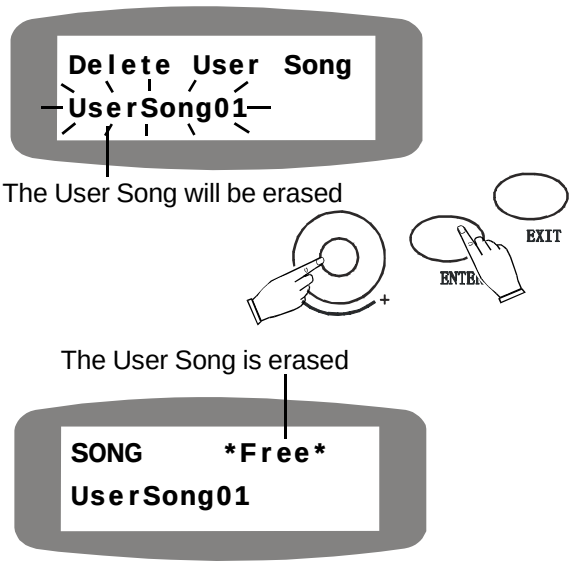
3. Play back User Song

In the saving window, press the ▶/■ button to playback your recording. Press the ▶/■ button again to stop the playback.

In the Song window, you could also select recorded user song to playback. Please refer to the <SONG> chapter in this Manual.

4. Erase User Song

Press the SONG button to enter the Song window. Select a recorded User song then press the [ENTER] to enter the User Song Delete window. The User Song name will blink. Press the [ENTER] to erase the song and "Free" will appear to indicate that this song is erased successfully.
Or, press the EXIT button to cancel the delete operation and turn to the Kit window.



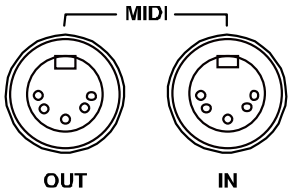
MIDI & USB

MIDI refers to Musical Instrument Digital Interface. This is a world wide standard communication interface that enables electronic musical instruments and computers to communicate each other so that musical message can pass between them. This exchange of information makes it possible to create a system of MIDI instruments and devices that offers far greater versatility and control than is available with isolated instruments. Whether you interface with computers, sequencers, expanders or other equipment your musical horizons will be greatly enhanced. For instance, you can edit your playing in computer or playback MIDI song from computer while play the drum.

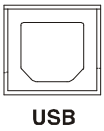
MIDI - The MIDI connector allows you to connect the drum directly to another MIDI divice.

1. **MIDI In**: This terminal receives MIDI data from an external MIDI device.

2. **MIDI Out**: This terminal transmits data from this instrument to other MIDI devices. The transmitted data includes the note and touch velocity produced while playing on the drum, as well as voice changes and recorded playback. Demo songs not transmitted.



USB - The USB connector allows you to connect the drum directly to your computer. It can connected without driver installation under the Windows XP, Windows Vista, Windows 7 & MAC OSX environment. The drum will be recognized as USB Audio device to receive and transmit the same MIDI messages described above.



MIDI APPLICATION CHART

Function	Transmitted	Recognized	Remarks
Basic Channel	10	1-16	
Note Number	0-127	0-127	
Velocity: Note ON Note OFF	1-127 64	1-127 0-127	
Major Controls: B9h 04h xxh Bxh 79h 00h Bxh 7Bh 00h	 Yes Yes Yes	 X Yes Yes	 Hi-Hat pedal control Reset All Controller All Notes OFF
Program Change	X	Yes *	
System Exclusive	Yes	Yes **	
RPN	X **	Yes **	
NRPN	Yes	Yes **	

* Chanel 10 supports Bank 0 only

** If you need detailed information about Exclusive, RPN and NRPN, please contact your vender

Note: Transmited note through chanel 10 for each pad if fixed as below:

PAD	NOTE		PAD	NOTE
Tom1	48		Crash Edge	49
Tom1 Rim	62		Ride	51
Tom2	45		Ride Edge	59
Tom2 Rim	63		Hi-Hat Open	46
Tom3	41		Hi-Hat Close	42
Tom3 Rim	64		Hi-Hat Pedal	44
Snare	38		Kick	36
Snare Rim1	37		Ride Mute	6
Snare Rim2	40		Crash Mute	7
Crash	55			

Note: Parts with * mark are for expended pads which are available with Kit C.

KIT LIST

1	Pop		28	Rock		U05	UserKit05
2	Jazz		29	Metal		U06	UserKit06
3	MPB		30	Solo		U07	UserKit07
4	Afro		31	NewOrleans		U08	UserKit08
5	Batucada		32	80's Rock		U09	UserKit09
6	Trio Eletr		33	Complement		U10	UserKit10
7	Notdeste		34	Blues		U11	UserKit11
8	Bossa Nova		35	Axe Bahia		U12	UserKit12
9	Salsa		36	Dance		U13	UserKit13
10	Bolero		37	EFXs		U14	UserKit14
11	Mod Reggae		38	Hardcore		U15	UserKit15
12	Reggae Rot		39	Punk Rock		U16	UserKit16
13	Dub		40	Punch		U17	UserKit17
14	Space		41	Rap		U18	UserKit18
15	Shuffle		42	Chords		U19	UserKit19
16	Studio		43	Percussion		U20	UserKit20
17	Up Pop		44	Drum Machi		U21	UserKit21
18	70 Disco		45	Brush		U22	UserKit22
19	Funky		46	Exotic		U23	UserKit23
20	Vintage		47	Beat Box		U24	UserKit24
21	Hip-Hop		48	Country		U25	UserKit25
22	Drum Bass		49	ModernJazz		U26	UserKit26
23	R&B		50	March Band		U27	UserKit27
24	DJ		U01	UserKit01		U28	UserKit28
25	Psico		U02	UserKit02		U29	UserKit29
26	Ballad		U03	UserKit03		U30	UserKit30
27	Baby		U04	UserKit04			

QUICK SELECTION BUTTON No.	KIT No.	KIT NAME
1	1	Pop
2	9	Salsa
3	12	Reggae Rot
4	15	Shuffle
5	23	R&B
6	25	Psic
7	36	Dance
8	37	EFXs
9	49	ModernJazz
10	50	March Band

Note: Default assignment for all User Kits is Pop

VOICE LIST

No.	Name	Decription	No.	Name	Decription	No.	Name	Decription
1	Kick 1	Standard Kick 1	46	Kick 46	Cartoon Kick	91	Snare 31	Standard Snare 5
2	Kick 2	Standard Kick 2	47	Kick 47	Disco Kick	92	Snare 32	FXS Snare 2
3	Kick 3	Low Kick 1	48	Kick 48	Low Kick 4	93	Snare 33	Power Snare 3
4	Kick 4	Standard Kick 3	49	Kick 49	Fusion Kick 1	94	Snare 34	Old Snare 1
5	Kick 5	Electronic Kick 1	50	Kick 50	Fusion Kick 2	95	Snare 35	Old Snare 2
6	Kick 6	Funk Kick	51	Kick 51	Fusion Kick 3	96	Snare 36	Power Snare 4
7	Kick 7	Electronic Kick 2	52	Kick 52	Jazz Kick 1	97	Snare 37	Old Snare 3
8	Kick 8	Standard Kick 4	53	Kick 53	Jazz Kick 2	98	Snare 38	Mute Snare
9	Kick 9	Standard Kick 5	54	Kick 54	Stick Kick	99	Snare 39	HipHop Snare 3
10	Kick 10	Low Kick 2	55	Kick 55	House Kick 2	100	Snare 40	HipHop Snare 4
11	Kick 11	Rock Kick 1	56	Kick 56	House Kick 3	101	Snare 41	HipHop Snare 5
12	Kick 12	Rock Kick 2	57	Kick 57	Power Q Kick	102	Snare 42	Fusion Snare
13	Kick 13	Rock Kick 3	58	Kick 58	Low Kick 5	103	Snare 43	Power Snare 5
14	Kick 14	Rock Kick 4	59	Kick 59	Q Kick 2	104	Snare 44	Rock Snare 6
15	Kick 15	Rock Kick 5	60	Kick 60	Hard Kick	105	Snare 45	Low Snare
16	Kick 16	Rock Kick 6	61	Snare 1	Standard Snare 1	106	Snare 46	Latin Snare 3
17	Kick 17	Rock Kick 7	62	Snare 2	Standard Snare 2	107	Snare 47	Electronic Snare 2
18	Kick 18	Q Kick 1	63	Snare 3	Standard Snare 3	108	Snare 48	Noise Snare
19	Kick 19	R&B Kick	64	Snare 4	Standard Snare 4	109	Snare 49	Electronic Snare 3
20	Kick 20	Room Kick 1	65	Snare 5	Q Snare 1	110	Snare 50	Jazz Snare 5
21	Kick 21	Latin Kick	66	Snare 6	Q Snare 2	111	Snare 51	Electronic Snare 4
22	Kick 22	Hiphop Kick 1	67	Snare 7	Q Snare 3	112	Snare 52	Electronic Snare 5
23	Kick 23	Hiphop Kick 2	68	Snare 8	Rock Snare 1	113	Snare 53	Funk Snare 3
24	Kick 24	Hiphop Kick 3	69	Snare 9	Electronic Snare 1	114	Snare 54	Rock Snare 7
25	Kick 25	Hiphop Kick 4	70	Snare 10	Rock Snare 2	115	Snare 55	Step Snare
26	Kick 26	Hiphop Kick 5	71	Snare 11	Jazz Snare 1	116	Snare 56	Rock Snare 8
27	Kick 27	Noise Kick	72	Snare 12	Jazz Snare 2	117	Snare 57	Rock Snare 9
28	Kick 28	Ord Kick 1	73	Snare 13	HipHop Snare 1	118	Snare 58	Rock Snare 10
29	Kick 29	Ord Kick 2	74	Snare 14	Power Snare 1	119	Snare 59	HipHop Snare 6
30	Kick 30	Ord Kick 3	75	Snare 15	Funk Snare 1	120	Snare 60	Q Snare 4
31	Kick 31	Ord Kick 4	76	Snare 16	Jazz Snare 3	121	Snare 61	Power Snare 6
32	Kick 32	Ord Kick 5	77	Snare 17	Rock Snare 3	122	Sn-Sid 1	Q Snare Rim 1
33	Kick 33	Ord Kick 6	78	Snare 18	Orc Snare	123	Sn-Sid 2	Q Snare Rim 2
34	Kick 34	High Kick 1	79	Snare 19	Rock Snare 4	124	Sn-Sid 3	Q Snare Rim 3
35	Kick 35	Vol Low Kick 1	80	Snare 20	Power Snare 2	125	Sn-Sid 4	Standard Snare Rim 1
36	Kick 36	High Kick 2	81	Snare 21	Latin Snare 1	126	Sn-Sid 5	Voc Snare Rim
37	Kick 37	Vol Low Kick 2	82	Snare 22	Rock Snare 5	127	Sn-Sid 6	Standard Snare Rim 2
38	Kick 38	Room Kick 2	83	Snare 23	Jazz Snare 4	128	Sn-Sid 7	Rock Snare Rim 1
39	Kick 39	High Kick 3	84	Snare 24	Voc Snare	129	Sn-Sid 8	Electronic Snare Rim
40	Kick 40	High Kick 4	85	Snare 25	HipHop Snare 2	130	Sn-Sid 9	Jazz Snare Rim
41	Kick 41	Step Kick	86	Snare 26	Latin Snare 2	131	Sn-Sid 10	FXS Snare Rim 1
42	Kick 42	Low Kick 3	87	Snare 27	Funk Snare 2	132	Sn-Sid 11	Voc Snare Rim 2
43	Kick 43	Room Kick 3	88	Snare 28	R&B Snare 1	133	Sn-Sid 12	Jazz Snare Rim
44	Kick 44	House Kick 1	89	Snare 29	FXS Snare 1	134	Sn-Sid 13	R&B Snare Rim
45	Kick 45	Power Kick 1	90	Snare 30	R&B Snare 2	135	Sn-Sid 14	Funk Snare Rim

VOICE LIST

No.	Name	Decription	No.	Name	Decription	No.	Name	Decription
136	Sn-Sid 15	FXS Snare Rim 2	181	Tom-Mi 11	Latin Mid Tom 2	226	Tom-Lo 20	R&B Low Tom 1
137	Tom-Hi 1	Q High Tom 1	182	Tom-Mi 12	Standard Mid Tom 2	227	Tom-Lo 21	Noise Low Tom 2
138	Tom-Hi 2	Q High Tom 2	183	Tom-Mi 13	Rock Mid Tom 3	228	Tom-Lo 22	Power Low Tom 2
139	Tom-Hi 3	Q High Tom 3	184	Tom-Mi 14	Room Mid Tom	229	Tom-Lo 23	Hard Low Tom 1
140	Tom-Hi 4	Q High Tom 4	185	Tom-Mi 15	R&B Mid Tom	230	Tom-Lo 24	Wood Low Tom 2
141	Tom-Hi 5	Standard High Tom	186	Tom-Mi 16	Electronic Mid Tom 2	231	Tom-Lo 25	Mute Low Tom
142	Tom-Hi 6	Rock High Tom 1	187	Tom-Mi 17	Jazz Mid Tom 1	232	Tom-Lo 26	Rock Low Tom 3
143	Tom-Hi 7	Jazz High Tom 1	188	Tom-Mi 18	HipHop Mid Tom 1	233	Tom-Lo 27	Power Low Tom 3
144	Tom-Hi 8	Rock High Tom 2	189	Tom-Mi 19	HipHop Mid Tom 2	234	Tom-Lo 28	R&B Low Tom 2
145	Tom-Hi 9	Funk High Tom	190	Tom-Mi 20	Latin Mid Tom 3	235	Tom-Lo 29	Bk Low Tom
146	Tom-Hi 10	Electronic High Tom 1	191	Tom-Mi 21	Wood Mid Tom 2	236	Tom-Lo 30	Hard Low Tom 2
147	Tom-Hi 11	Latin High Tom 1	192	Tom-Mi 22	Mute Mid Tom	237	Tom-Lo 31	Hard Low Tom 3
148	Tom-Hi 12	R&B High Tom	193	Tom-Mi 23	Power Mid Tom 2	238	Tom-Lo 32	Tad Low Tom
149	Tom-Hi 13	FXS High Tom 1	194	Tom-Mi 24	Fusion Mid Tom	239	Tom-Lo 33	Tbe Low Tom
150	Tom-Hi 14	Rock High Tom 3	195	Tom-Mi 25	Q Mid Tom 3	240	Tom-Lo 34	909 Low Tom
151	Tom-Hi 15	Jazz High Tom 2	196	Tom-Mi 26	Bk Mid Tom 1	241	Tom-Lo 35	Latin Low Tom 3
152	Tom-Hi 16	Old High Tom	197	Tom-Mi 27	Bk Mid Tom 2	242	Tom-Lo 36	Brush Low Tom
153	Tom-Hi 17	Rock High Tom 4	198	Tom-Mi 28	Hard Mid Tom	243	Tom-Lo 37	Ptalk Low Tom
154	Tom-Hi 18	Wood High Tom 1	199	Tom-Mi 29	909 Mid Tom	244	Tom-Lo 38	Nc14" Low Tom
155	Tom-Hi 19	Electronic High Tom 2	200	Tom-Mi 30	Latin Mid Tom 4	245	Tom-Lo 39	Nc16" Low Tom
156	Tom-Hi 20	Wood High Tom 2	201	Tom-Mi 31	Brush Mid Tom	246	Tom-Lo 40	Pr14" Low Tom
157	Tom-Hi 21	FXS High Tom 2	202	Tom-Mi 32	Ptalk Mid Tom	247	Tom-Lo 41	Pr16" Low Tom
158	Tom-Hi 22	Power High Tom	203	Tom-Mi 33	Nc12" Mid Tom	248	Tom-Lo 42	Reb Low Tom
159	Tom-Hi 23	Step High Tom	204	Tom-Mi 34	Pr12" Mid Tom	249	Hat-Cl 1	Rock Close 1
160	Tom-Hi 24	Room High Tom	205	Tom-Mi 35	Reb Mid Tom 1	250	Hat-Cl 2	Jazz Close 1
161	Tom-Hi 25	Bk High Tom	206	Tom-Mi 36	Reb Mid Tom 2	251	Hat-Cl 3	Standard Close 1
162	Tom-Hi 26	Hard High Tom	207	Tom-Lo 1	Q Low Tom 1	252	Hat-Cl 4	Funk Close 1
163	Tom-Hi 27	909 High Tom	208	Tom-Lo 2	Q Low Tom 2	253	Hat-Cl 5	Rock Close 2
164	Tom-Hi 28	Latin High Tom 2	209	Tom-Lo 3	Q Low Tom 3	254	Hat-Cl 6	Funk Close 2
165	Tom-Hi 29	Brush High Tom	210	Tom-Lo 4	Standard Low Tom 1	255	Hat-Cl 7	Rock Close 3
166	Tom-Hi 30	Ptalk High Tom	211	Tom-Lo 5	Rock Low Tom 1	256	Hat-Cl 8	Electronic Close 1
167	Tom-Hi 31	Nc10" High Tom	212	Tom-Lo 6	FXS Low Tom	257	Hat-Cl 9	Electronic Close 2
168	Tom-Hi 32	Pr8" High Tom	213	Tom-Lo 7	Jazz Low Tom 1	258	Hat-Cl 10	Standard Close 2
169	Tom-Hi 33	Pr10" High Tom	214	Tom-Lo 8	Rock Low Tom 2	259	Hat-Cl 11	Funk Close 3
170	Tom-Hi 34	Reb High Tom	215	Tom-Lo 9	Funk Low Tom	260	Hat-Cl 12	Rock Close 4
171	Tom-Mi 1	Q Mid Tom 1	216	Tom-Lo 10	Jazz Low Tom 2	261	Hat-Cl 13	R&B Close 1
172	Tom-Mi 2	Q Mid Tom 2	217	Tom-Lo 11	Latin Low Tom 2	262	Hat-Cl 14	Standard Close 3
173	Tom-Mi 3	Standard Mid Tom 1	218	Tom-Lo 12	Jazz Low Tom 3	263	Hat-Cl 15	FXS Close 1
174	Tom-Mi 4	Funk Mid Tom	219	Tom-Lo 13	Power Low Tom 1	264	Hat-Cl 16	Standard Close 4
175	Tom-Mi 5	Electronic Mid Tom 1	220	Tom-Lo 14	Standard Low Tom 2	265	Hat-Cl 17	Jazz Close 2
176	Tom-Mi 6	Wood Mid Tom 1	221	Tom-Lo 15	Room Low Tom	266	Hat-Cl 18	FXS Close 2
177	Tom-Mi 7	Rock Mid Tom 1	222	Tom-Lo 16	Wood Low Tom 1	267	Hat-Cl 19	Electronic Close 3
178	Tom-Mi 8	Power Mid Tom 1	223	Tom-Lo 17	Electronic Low Tom 1	268	Hat-Cl 20	Voc Close
179	Tom-Mi 9	Latin Mid Tom 1	224	Tom-Lo 18	Noise Low Tom 1	269	Hat-Cl 21	Rock Close 5
180	Tom-Mi 10	Rock Mid Tom 2	225	Tom-Lo 19	Electronic Low Tom 2	270	Hat-Cl 22	Noise Close

VOICE LIST

No.	Name	Decription	No.	Name	Decription	No.	Name	Decription
271	Hat-Cl 23	Standard Close 5	316	Hat-Ped 12	Reb Pedal	361	Ride 16	Standard Ride 3
272	Hat-Cl 24	Standard Close 6	317	Crash 1	Standard Crash 1	362	Ride 17	Jazz Ride 2
273	Hat-Cl 25	Rock Close 6	318	Crash 2	Standard Crash 2	363	Ride 18	FXS Ride 3
274	Hat-Cl 26	Rock Close 7	319	Crash 3	FXS Crash 1	364	Ride 19	Pride Bell 1
275	Hat-Cl 27	R&B Close 2	320	Crash 4	HipHop Crash	365	Ride 20	Pride Bell 2
276	Hat-Cl 28	Fat Close	321	Crash 5	DJ Crash	366	Ride 21	Standard Ride 4
277	Hat-Cl 29	Jazz Close 3	322	Crash 6	Rock Crash 1	367	Ride 22	Standard Ride 5
278	Hat-Cl 30	Jazz Close 4	323	Crash 7	Rock Splash	368	Ride 23	L2 Ride
279	Hat-Cl 31	Rbrush Close 1	324	Crash 8	Electronic Crash 1	369	Ride 24	Rbrush Ride 1
280	Hat-Cl 32	Rbrush Close 2	325	Crash 9	Mute Crash	370	Ride 25	Rbrush Ride 2
281	Hat-Cl 33	909 Close	326	Crash 10	Voc Crash 1	371	Ride 26	908 Ride Bell
282	Hat-Cl 34	Brush Close 1	327	Crash 11	Voc Crash 2	372	Ride 27	909 Ride Rim
283	Hat-Cl 35	Brush Close 2	328	Crash 12	Rock Crash 2	373	Ride 28	Brush Ride
284	Hat-Cl 36	14" Close	329	Crash 13	Jazz Crash 1	374	Ride 29	Brush Ride Rim
285	Hat-Cl 37	Reb Close	330	Crash 14	Standard Crash 3	375	China 1	Chinese Sound 1
286	Hat-Op 1	Standard Open 1	331	Crash 15	FXS Crash 2	376	China 2	Chinese Sound 2
287	Hat-Op 2	Jazz Open 1	332	Crash 16	Wood Crash	377	China 3	Chinese Sound 3
288	Hat-Op 3	Voc Open	333	Crash 17	Electronic Crash 2	378	China 4	Chinese Sound 4
289	Hat-Op 4	Rock Open 1	334	Crash 18	Standard Crash 4	379	China 5	Chinese Sound 5
290	Hat-Op 5	Electronic Open 1	335	Crash 19	Jazz Crash 2	380	China 6	Chinese Sound 6
291	Hat-Op 6	Electronic Open 2	336	Crash 20	Standard Splash	381	China 7	Chinese Sound 7
292	Hat-Op 7	Funk Open 1	337	Crash 21	Standard Crash 5	382	China 8	Chinese Sound 8
293	Hat-Op 8	FXS Open 1	338	Crash 22	Standard Crash 6	383	China 9	Chinese Sound 9
294	Hat-Op 9	Rock Open 2	339	Crash 23	Rock Crash 3	384	China 10	Chinese Sound 10
295	Hat-Op 10	Funk Open 2	340	Crash 24	In Crash A	385	China 11	Chinese Sound 11
296	Hat-Op 11	Electronic Open 3	341	Crash 25	In Crash B	386	China 12	Chinese Sound 12
297	Hat-Op 12	FXS Open 2	342	Crash 26	16" Splash	387	Perc 1	CowBell 01
298	Hat-Op 13	Standard Open 2	343	Crash 27	Rbrush Crash	388	Perc 2	CowBell 02
299	Hat-Op 14	FXS Open 3	344	Crash 28	Brush Splash	389	Perc 3	CowBell 03
300	Hat-Op 15	Electronic Open 4	345	Crash 29	14" Crash	390	Perc 4	CowBell 04
301	Hat-Op 16	Wood Open	346	Ride 1	Standard Ride 1	391	Perc 5	CowBell 05
302	Hat-Op 17	Half Open	347	Ride 2	Standard Ride 2	392	Perc 6	CowBell 06
303	Hat-Op 18	R&B Open	348	Ride 3	Rock Ride 1	393	Perc 7	Cowbell 07
304	Hat-Op 19	Jazz Open 2	349	Ride 4	Standard Ride Bell	394	Perc 8	Con-Hi
305	Hat-Ped 1	Standard Pedal 1	350	Ride 5	Crash Ride	395	Perc 9	Con-Lo 01
306	Hat-Ped 2	Power Pedal	351	Ride 6	Rock Ride 2	396	Perc 10	Con-Lo 02
307	Hat-Ped 3	Rock Pedal 1	352	Ride 7	Electronic Ride 1	397	Perc 11	Met Click
308	Hat-Ped 4	Electronic Pedal	353	Ride 8	FXS Ride 1	398	Perc 12	Met Bell
309	Hat-Ped 5	Rock Pedal 2	354	Ride 9	Electronic Ride 2	399	Perc 13	Hand Clap
310	Hat-Ped 6	Funk Pedal 1	355	Ride 10	Voc Ride	400	Perc 14	Chin Cy
311	Hat-Ped 7	Jazz Pedal 1	356	Ride 11	Wood Ride	401	Perc 15	Tambourine
312	Hat-Ped 8	Standard Pedal 2	357	Ride 12	FXS Ride 2	402	Perc 16	Vibraslap
313	Hat-Ped 9	909 Pedal	358	Ride 13	Jazz Ride 1	403	Perc 17	Bongo-Hi
314	Hat-Ped 10	R&B Pedal	359	Ride 14	Electronic Ride 3	404	Perc 18	Bongo-Lo
315	Hat-Ped 11	Funk Pedal 2	360	Ride 15	Electronic Ride 4	405	Perc 19	Conga-Mu

VOICE LIST

No.	Name	Decription	No.	Name	Decription	No.	Name	Decription
406	Perc 20	Conga-Op	435	Perc 49	Tamute 01	464	Fxs 20	Voice Effect 20
407	Perc 21	Conga-Lo	436	Perc 50	Tamute 02	465	Fxs 21	Voice Effect 21
408	Perc 22	Timbale-Hi	437	Perc 51	Tamute 03	466	Fxs 22	Voice Effect 22
409	Perc 23	Timbale-Lo	438	Perc 52	ltbtone	467	Fxs 23	Voice Effect 23
410	Perc 24	Agogo-Hi	439	Perc 53	mbgtone	468	Fxs 24	Voice Effect 24
411	Perc 25	Agogo-Lo	440	Perc 54	quintone	469	Fxs 25	Voice Effect 25
412	Perc 26	Cabasa	441	Perc 55	Tmsound 01	470	Fxs 26	Voice Effect 26
413	Perc 27	Maracas	442	Perc 56	Tmsound 02	471	Fxs 27	Voice Effect 27
414	Perc 28	Whistle-Sh	443	Perc 57	Tmsound 03	472	Fxs 28	Voice Effect 28
415	Perc 29	Whistle-Lg	444	Perc 58	Tmsound 04	473	Fxs 29	Voice Effect 29
416	Perc 30	Guiro-Sh	445	Fxs 1	Voice Effect 01	474	Fxs 30	Voice Effect 30
417	Perc 31	Guiro-Lg	446	Fxs 2	Voice Effect 02	475	Fxs 31	Voice Effect 31
418	Perc 32	Claves	447	Fxs 3	Voice Effect 03	476	Fxs 32	Voice Effect 32
419	Perc 33	Block-Hi	448	Fxs 4	Voice Effect 04	477	Fxs 33	Voice Effect 33
420	Perc 34	Block-Lo	449	Fxs 5	Voice Effect 05	478	Fxs 34	Voice Effect 34
421	Perc 35	Cuica-Mu	450	Fxs 6	Voice Effect 06	479	Fxs 35	Voice Effect 35
422	Perc 36	Cuica-Op	451	Fxs 7	Voice Effect 07	480	Fxs 36	Voice Effect 36
423	Perc 37	Trian-Mu	452	Fxs 8	Voice Effect 08	481	Fxs 37	Voice Effect 37
424	Perc 38	Trian-Op	453	Fxs 9	Voice Effect 09	482	Fxs 38	Voice Effect 38
425	Perc 39	Shaker	454	Fxs 10	Voice Effect 10	483	Fxs 39	Voice Effect 39
426	Perc 40	Jingle Bell	455	Fxs 11	Voice Effect 11	484	Fxs 40	Voice Effect 40
427	Perc 41	Bell Tree	456	Fxs 12	Voice Effect 12	485	Fxs 41	Voice Effect 41
428	Perc 42	Castinets	457	Fxs 13	Voice Effect 13	486	Fxs 42	Voice Effect 42
429	Perc 43	Surdo-Mu	458	Fxs 14	Voice Effect 14	487	Fxs 43	Voice Effect 43
430	Perc 44	Surdo-Op	459	Fxs 15	Voice Effect 15	488	Fxs 44	Voice Effect 44
431	Perc 45	Full Shaker	460	Fxs 16	Voice Effect 16	489	Fxs 45	Voice Effect 45
432	Perc 46	Full Claves	461	Fxs 17	Voice Effect 17	490	Fxs 46	Voice Effect 46
433	Perc 47	Full Cabasa	462	Fxs 18	Voice Effect 18	491	Fxs 47	Voice Effect 47
434	Perc 48	Full Maracas	463	Fxs 19	Voice Effect 19	492	Fxs 48	Voice Effect 48

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Voice Number	Category
1 - 60	Kick drum
61 - 121	Snare head
122 - 136	Snare rim
137 - 170	Hi-Tom
171 - 206	Middle-Tom
207 - 248	Low-Tom
249 - 285	Hi-Hat close
286 - 304	Hi-Hat open
305 - 316	Hi-Hat pedal
317 - 345	Cash Cymbal
346 - 374	Ride Cymbal
375 - 386	Chinese percussion sound
387 - 444	Other percussion sound
445 - 492	Effect sound

SPECIFICATIONS

Configuration	3 X 8” Tom (with rim), 8” Snare (double rims), 12” Crash cymbal l (with Edge & choke), 12” Ride cymbal l (with Edge & choke), 8” Hi-Hat, 8” Kick, Hi-Hat pedal
Voice	492
Drum Kit	50 preset kits and 30 user kits
Demo Song	74, Full, Drum Only and Mute mode
Sound Effects	Reverb effect with professional DSP processor
Equalizer	10 preset types
Metronome	Tempo, Time signature, Sound
Count Exercise	1 – 3 minutes
Setup Menu	Accomp & Drum volume for Demo, Master tuning, count sensitivity, Local, Equalizer, Advanced (Sensitivity, Dynamic range, Velocity Curve, Cross talk, Hi-Hat Pedal), Reset
Pad Edit	Voice, Volume, Pan, Pitch, Reverb level
Record	10 Songs
Display	Back-light LCD, 2 Row X 16 Characters
Power	12V DC
Aux. Socket	Headphone, Line In/Out, MIDI In/Out, USB, Power In

HD-010B DIGITAL DRUM

USER'S MANUAL

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